

WAR DEPARTMENT

STORM RAINFALL

IN THE
UNITED STATES

DEPTH - AREA - DURATION
DATA

CORPS OF ENGINEERS, U.S. ARMY



1945

US Engineer Dept.

STORM RAINFALL IN THE UNITED STATES

FOREWORD

The design and operation of flood control, navigation and multiple purpose projects require a thorough analysis of rainfall data. Therefore, the Corps of Engineers, United States Army, organized a program in 1937 for the study of about a thousand major storms of record distributed throughout the entire continental United States. The program provides for a continuing analysis of current storms of major proportions.

The investigation of major storms by the Division and District Offices of the Engineer Department (Corps of Engineers) has been divided into Part I and Part II studies. Part I of the Storm Study consists of the compilation of basic precipitation data, preparation of mass rainfall curves and a preliminary total storm isohyetal map. In addition to published records of the Weather Bureau, Part I includes all available precipitation data and miscellaneous information on the storm obtainable from the manuscripts of original records, files of municipal agencies, newspapers, etc. Unofficial observations of precipitation are carefully analyzed and every effort is made to classify them as to their reliability. Part I of the Storm Study, assembled and organized by the various District Offices, is reviewed by the Hydrometeorological Section of the Weather Bureau and the mass-rainfall curves are correlated with the meteorological analysis of the storm. Upon completion of the review by the Hydrometeorological Section, Part I is returned to the originating District Office for preparation of Part II of the Storm Study. The preparation of Part II involves the following steps:

- a. Preparation of the final total storm isohyetal map based on the selected storm period, delineation of zones on the isohyetal map and grouping of rainfall stations by zones.
- b. Tabulation of contemporaneous rainfall quantities as scaled from mass rainfall curves, for periods usually increasing by 6-hour increments.
- c. Tabulation of absolute maxima rainfall quantities for durations of 6, 12, 18 and 24 hours for stations within the zones of excessive rainfall intensity.
- d. Computation of mass rainfall depths representing the average depth of rainfall over selected areas of the storm.
- e. The computation of maxima depth-area-duration data for various combinations of contiguous zones.

The following sheets summarize the results of the individual storm studies. It is the intention of the Engineer Department to issue similar pertinent data sheets for storms not previously studied and current storms as data become available.

(I)



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DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON 25, D. C.

2 January 1958

STORM RAINFALL IN THE UNITED STATES

FOREWORD

In 1937 the Corps of Engineers, U. S. Army, initiated a nationwide study of major storms with the purpose of accumulating comprehensive rainfall data necessary for evaluating flood potentialities of drainage basins that would affect the design and operation of flood control, navigation, and multiple-purpose projects. The Hydrometeorological Section of the Weather Bureau has participated in the review and analyses of these data and in the preparation of special studies based thereon. The program provides for a continuing analysis of current storms of major proportions.

The investigation of major storms by the Division and District offices of the Corps of Engineers is accomplished by one of two procedures. The Standard Storm Study Procedure is used in the analysis of storms having moderate areal coverage and relatively high rainfall intensities. The majority of storms studied are in this category. The Regional Storm Study Procedure is used to analyze storms covering large areas.

The Standard Storm Study Procedure is divided into Part I and Part II studies. Part I of a Storm Study consists of the compilation of basic precipitation data, preparation of mass rainfall curves and a preliminary total storm isohyetal map. In addition to published records of the Weather Bureau, Part I includes all available precipitation data and miscellaneous information on the storm obtainable from the manuscripts of original records, files of municipal agencies, newspapers, etc. Unofficial observations of precipitation are carefully analyzed and every effort is made to classify them as to their reliability. Part I of a Storm Study, assembled and organized by representatives of the various District Offices, is reviewed by the Hydrometeorological Section of the Weather Bureau and the mass-rainfall curves are correlated with the meteorological analysis of the storm. Upon completion of the review by the Hydrometeorological Section, the Part I is returned to the originating Office for preparation of Part II of the Storm Study. The preparation of Part II involves the following steps:

- a. Preparation of the final total storm isohyetal map based on the selected storm period, delineation of zones on the isohyetal map and grouping of rainfall stations by zones.
- b. Tabulation of contemporaneous rainfall quantities as scaled from mass rainfall curves, for periods usually increasing by 6-hour increments.
- c. Tabulation of absolute maxima rainfall quantities for durations of 6, 12, 18 and 24 hours for stations within the zones of excessive rainfall intensity.
- d. Computation of mass rainfall depths representing the average depth of rainfall over selected areas of the storm.
- e. The computation of maxima depth-area-duration data for various combinations of contiguous zones.

The Regional Storm Study Procedure is believed to be particularly applicable to the study of storms covering areas in excess of 20,000 square miles. Several computational features of the Standard Storm Study Procedure have been shortened or eliminated in order to reduce the work necessary for completion of the study. The elimination of the Part I study is one of the major time saving features. Several of the storms for which pertinent data sheets are included in this publication (MR 8-6 thru MR 8-30), have been worked by the Regional Storm Study Procedure.

Preparation of a Regional Storm Study normally involves the following steps:

- a. Preparation of an isohyetal map of the area to be studied. Lines of latitude and longitude are utilized to divide the area into one-degree quadrangles. These one-degree quadrangles are designated as zones by a number-letter-number identification.
- b. Tabulation of contemporaneous rainfall values, usually in 6 hour incremental amounts, as given on hourly recorder records of precipitation stations.
- c. Tabulation of absolute maxima rainfall quantities for durations of 6, 12, 18 and 24 hours for stations with excessive rainfall intensities.
- d. Computation of mass rainfall values representing the average depth over selected areas of the storm. This requires a tabulation of average depths by quadrangles, a tabulation of average depths by isohyets in areas of heaviest rainfall and combination of values for contiguous quadrangles to determine the average depth over large areas.
- e. Depth-area-duration curves are then constructed using the tabulation described above.

In connection with the distribution of data referred to above, it is desired to give special recognition to similar work accomplished by the Miami Conservancy District, State of Ohio, as presented in their outstanding report "Storm Rainfall in the Eastern United States," 1936. Studies by the Conservancy District were initiated in 1914 and carried on intensively until recent years. The storm study program conducted by the Corps of Engineers since 1937 has involved extension of these prior studies by the Miami Conservancy District, and additional analyses to determine incremental variations in rainfall intensities during the storms.

The following pertinent data sheets summarize the results of the individual storm studies. It is the intention of the Chief of Engineers to issue similar pertinent data sheets for additional storms as the data become available.

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DEPTH-AREA-DURATION DATA

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Covering S-2 and S-3 Forms completed through 2 January 1962 including initial issue and supplemental printings. The sheets contained in this supplemental printing are identified by an asterisk (*).

Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
NA 1-3	20-24 September 1882	Paterson, N. J.
NA 1-4	17-22 May 1894	Bridgeton, N. J.
NA 1-6	12-14 July 1897	Southington, Conn.
NA 1-7	26-29 July 1897	Jewell, Md.
NA 1-7 (a)	26-29 July 1897	Elizabeth, N. J.
NA 1-7 (b)	26-29 July 1897	Jewell, Md.
NA 1-9	12-15 September 1904	Friesburg, N. J.
NA 1-11	18-23 July 1919	Boonton, N. J.
NA 1-12	13-14 August 1919	Northfield, N. J.
NA 1-16 A	22-23 July 1927	Lykens, Pa.
NA 1-16 B	22-23 July 1927	Phoenixville, Pa.
NA 1-17	2-4 November 1927	Kinsman Notch, N. H.
NA 1-18	10-13 August 1928	Cheltenham, Md.
NA 1-21	4-6 October 1932	Elka Park, N. Y.
NA 1-23	11-14 April 1933	Durham, N. H.
NA 1-24	20-24 August 1933	Peekamoose, N. Y.
NA 1-24 (a)	20-24 August 1933	Peekamoose, N. Y.
NA 1-24 (b)	20-24 August 1933	York, Pa.
NA 1-27	6-10 July 1935	Hector, N. Y.
NA 1-30	19-21 December 1936	Providence, R. I.
NA 2-2	17-22 September 1938	Buck, Conn.
NA 2-3	19 August 1939	Manahawkin, N. J.
NA 2-4	31 Aug - 1 Sept 1940	Ewan, N. J.
NA 2-5	19-23 May 1942	Carbondale, Pa.
NA 2-7	26-28 July 1942	Larchmont, N. Y.
NA 2-8	7-10 August 1942	Charlottesville, Va.
NA 2-16	12-15 September 1944	New Brunswick, N. J.
NA 2-17	22-23 July 1945	Cedard Grove, N. J.
*NA 2-21 A	11-15 August 1955	Slide Mt., N. Y.
NA 2-21 B	10-15 August 1955	New Bern, N. C.
*NA 2-22 A	17-20 August 1955	Westfield, Mass.
NA 2-22 B	16-19 August 1955	Big Meadows, Va.
SA 1-1	30 May-1 June 1889	Wellsboro, Pa.
SA 1-4	3-5 August 1898	Camden, N. J.
SA 1-5	24-27 September 1902	Colora, Md.
SA 1-6	12 July 1903	Baltimore, Md.

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Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
SA 1-7	21-22 August 1915	Gordon, Pa.
SA 1-8	18 August 1920	Lancaster, Pa.
SA 1-9	9-10 October 1922	Baltimore, Md.
SA 1-10	8 August 1925	Harrisburg, Pa.
SA 1-11	24 July 1933	Lakeville, Pa.
SA 1-13	18-20 September 1894	Smiths Corner, Pa.
SA 1-14	26-28 June 1938	Odessa, Del.
SA 1-15	27 July-1 August 1923	Orange, Va.
SA 1-19	27-30 September 1896	Bloomery, W. Va.
SA 1-22 A	22-25 September 1912	Emmitsburg, Md.
SA 1-22 B	22-25 September 1912	Camden, S. C.
SA 1-24	7-12 May 1924	Charlottesville, Va.
SA 1-26	2-6 September 1935	Easton, Md.
SA 1-27	16-21 March 1936	Romney, W. Va.
SA 1-28 A	11-17 October 1942	Big Meadows, Va.
SA 1-28 B	11-17 October 1942	Hatteras, N. C.
SA 1-29	2-4 September 1943	Washington, D. C.
SA 2-1	26-28 August 1893	Manning, S. C.
SA 2-2	3-6 August 1894	Folkland, N. C.
SA 2-3	21-23 September 1898	Patterson, N. C.
SA 2-4	18-22 May 1901	Lumberton, N. C.
SA 2-5	16-19 September 1901	Americus, Ga.
SA 2-6	23-28 August 1908	Vade Mecum, N. C.
SA 2-7	14-15 March 1912	Mount Holly, N. C.
SA 2-8	13-16 October 1914	Mount Mitchell, N. C.
SA 2-9	13-17 July 1916	Altapass, N. C.
SA 2-9 (a)	13-17 July 1916	Kingstree, S. C.
SA 2-10	24-27 October 1918	Tryon, N. C.
SA 2-12	9-13 August 1928	Settle, N. C.
SA 2-13	13-17 August 1928	Caesars Head, S. C.
SA 2-14	4-7 September 1928	Marion, S. C.
SA 2-15	16-19 September 1928	Darlington, S. C.
SA 3-1	27-31 July 1887	Union Point, Ga.
*SA 3-2	8-12 September 1888	Greenwood, S. C.
*SA 3-3	5-9 March 1891	Kosciusko, Miss.
*SA 3-4	6-8 July 1896	Greenwood, S. C.
SA 3-5	26-29 August 1898	St. Andrews Bay, Fla.
SA 3-6	30 Aug-3 Sept. 1898	Port Royal, S. C.
SA 3-7	2-4 October 1898	Highlands, N. C.
SA 3-9	10-13 February 1905	Putnam, Ga.
SA 3-11	28-31 August 1911	St. George, Ga.
SA 3-14	26-31 October 1918	Highlands, N. C.
SA 3-16	13-17 September 1924	Beaufort, N. C.
SA 3-19	3-5 March 1929	Butler, Ga.

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Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
SA 3-20	23-28 September 1929	Glennville, Ga.
SA 3-21 (a)	5-10 April 1936	Washington, Ga.
SA 3-21 (b)	5-10 April 1936	Franklin, La.
SA 3-22	29 July-2 August 1936	Blountstown, Fla.
SA 3-23	29 Sep-3 Oct 1929	Vernon, Fla.
SA 3-24	16-19 January 1943	Riverfalls, Ala.
SA 4-9	21-26 May 1906	Middleburg, Fla.
SA 4-15	1-3 August 1915	St. Petersburg, Fla.
SA 4-20	4-11 October 1924	New Smyrna, Fla.
SA 4-23	17-21 September 1926	Bay Minette, Ala.
SA 4-24	7-12 August 1928	St. Cloud, Fla.
SA 5-1	12-16 June 1934	St. Leo, Fla.
SA 5-6	17-22 October 1941	Trenton, Fla.
SA 5-7	14-17 April 1942	Greenacres City, Fla.
SA 5-8	3-7 September 1950	Yankeetown, Fla.
SA 5-11 A	15-18 October 1932	Rock House, N. C.
SA 5-11 B	14-18 October 1932	Tuscaloosa, Ala.
SA 5-12	5-9 September 1934	Beaufort, N. C.
SA 5-13	24-28 April 1937	Clear Springs, Md.
SA 5-14	17-20 October 1937	Caesars Head, S. C.
SA 5-16	16-21 September 1938	Belhaven, N. C.
SA 5-19 (a)	10-17 August 1940	Keysville, Va.
SA 5-19 (b)	10-17 August 1940	Buck Creek, N. C.
SA 5-19 (c)	10-17 August 1940	Swansboro, N. C.
SA 5-19 (d)	10-17 August 1940	Beaufort, S. C.
SA 5-23	28-31 July 1908	New Bern, N. C.
SA 5-24	14-16 September 1917	Hatteras, N. C.
SA 5-25	16-25 July 1919	Callaville, Va.
SA 5-26	28 Nov.-1 Dec. 1934	Southport, N. C.
*SA 5-27	13-18 September 1945	Rockingham, N. C.
LMV 1-1	17-20 March 1894	Washington, Ark.
LMV 1-3	28 Sept.-1 Oct 1898	Pensacola, Fla.
LMV 1-3 (a)	28 Sept.-1 Oct 1898	Sikeston, Mo.
LMV 1-3 (b)	28 Sept.-1 Oct 1898	Pensacola, Fla.
LMV 1-4	17-21 November 1906	Austin, Miss.
LMV 1-5	1-3 January 1907	Malvern, Ark.
LMV 1-6	16-20 November 1907	Crockett, Tex.
LMV 1-8	12-15 April 1911	Benton, Ark.
LMV 1-9	10-12 January 1913	Bee Branch, Ark.
LMV 1-10	16-21 August 1915	San Augustine, Tex.
LMV 1-11	9-13 May 1918	Mountain Home, Ark.
LMV 1-12	15-17 March 1919	Henderson, Tenn.

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Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
LMV 1-13 A	25-28 October 1919	Steelville, Mo.
LMV 1-13 B	30 Oct.-1 Nov. 1919	Leitchfield, Ky.
LMV 1-14	11-13 March 1927	Huttig, Ark.
LMV 1-16	12-13 December 1927	Ozark, Ark.
LMV 1-17	16-18 July 1929	Woodville, Miss.
LMV 1-18	19-21 November 1934	Millry, Ala.
LMV 1-19	18-21 January 1935	Hernando, Miss.
LMV 2-3	1-4 December 1897	Jackson, Miss.
LMV 2-4	8-11 December 1899	Port Gibson, Miss.
LMV 2-5	15-18 April 1900	Eutaw, Ala.
LMV 2-7	25-29 March 1902	Ripley, Miss.
LMV 2-9	24-28 May 1909	Shocco, Miss.
LMV 2-10	30 May-4 June 1909	Pearlington, Miss.
LMV 2-11	12-17 April 1912	Pearl River, La.
LMV 2-13	28-30 September 1915	Franklinton, La.
LMV 2-15	11-14 March 1921	Magnolia, Miss.
LMV 2-18	1-5 June 1928	Thomesville, Ala.
LMV 2-19	12-17 June 1928	Crystal Springs, Miss.
LMV 2-20	11-16 March 1929	Elba, Ala.
LMV 2-22	6-11 January 1930	Arkadelphia, Ark.
LMV 2-23	6-11 May 1930	Swan Lake, Miss.
LMV 2-24	15-19 May 1930	Camden, Ark.
LMV 2-26	22-27 July 1933	Logansport, La.
LMV 3-2	6-10 September 1893	Franklin, La.
LMV 3-7	4-6 January 1899	Canton, Miss.
LMV 3-10	23-27 December 1904	Liberty Hill, La.
LMV 3-12	7-10 May 1907	Lafayette, La.
LMV 3-13	28-31 May 1907	Sugarland, Tex.
LMV 3-14	26 July-2 Aug. 1908	Franklin, La.
*LMV 3-15	16-20 September 1908	Cameron, La.
LMV 3-16	19-22 September 1909	St. Francisville, La.
LMV 3-17	9-15 December 1911	Natchez, Miss.
LMV 3-18	25-30 September 1913	Sugartown, La.
LMV 3-19	24-28 March 1914	Merryville, La.
LMV 4-4	20-22 March 1926	St. Francisville, La.
LMV 4-5	23-26 August 1926	Donaldsonville, La.
LMV 4-6	11-14 February 1927	Clinton, La.
LMV 4-7	28 Feb.-1 March 1927	Schriever, La.
LMV 4-8	12-16 April 1927	Jeff. Plaq. Drain Dist., La.

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Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
*LMV 4-9	20-23 May 1927	Kaplan, La.
*LMV 4-10	14-16 May 1928	Woodville, Miss.
LMV 4-13	5-9 September 1929	Algiers, La.
LMV 4-16	11-13 January 1932	Urania, La.
LMV 4-19	27 Feb.-4 Mar. 1934	De Ridder, La.
LMV 4-20	2-7 May 1935	Melville, La.
LMV 4-21	16-20 May 1935	Simmesport, La.
LMV 4-22 (a)	30 Sept-4 Oct. 1937	New Orleans, La.
LMV 4-22 (b)	30 Sept-4 Oct. 1937	Woodworth, La.
LMV 4-23	12-15 August 1938	Koll, La.
LMV 4-24	6-9 August 1940	Miller Island, La.
LMV 4-25	30 June-2 July 1940	Index, Ark.
LMV 4-26	9-11 November 1940	Hackberry, La.
LMV 4-27	13-17 June 1886	Alexandria, La.
LMV 4-28	26-31 May 1941	Jennings, La.
*LMV 5-3	23 April-4 May 1953	Camp Polk, La.
*LMV 5-4	11-19 May 1953	Harrisonburg Dam, La.
UMV 1-1	24-28 July 1892	Minneapolis, Minn.
UMV 1-2	18-22 July 1897	Lambert, Minn.
UMV 1-3	2-6 June 1898	Pine River Dam, Minn.
UMV 1-4 A	11-13 June 1899	Minnesota City, Minn.
UMV 1-4 B	13-14 June 1899	Mason City, Ia.
UMV 1-5	1-6 July 1900	Wausau, Wisc.
UMV 1-6	7-11 September 1900	Elk Point, S. Dak.
UMV 1-7 A	27-30 October 1900	La Crosse, Wis.
UMV 1-7 B	30 Oct.-1 Nov. 1900	Lenox, Ia.
UMV 1-8	1-6 July 1901	New Folden, Minn.
UMV 1-10	8 August 1906	Milton, Wis.
UMV 1-11	18-23 July 1909	Ironwood, Mich.
UMV 1-11 (a)	18-23 July 1909	Beaulieu, Minn.
UMV 1-11 (b)	18-23 July 1909	Ironwood, Mich.
UMV 1-14 A	16-21 August 1913	New London, Minn.
UMV 1-14 B	16-21 August 1913	Worthington, Minn.
UMV 1-15	11-16 September 1915	Dodgeville, Wis.
UMV 1-16	13-17 July 1916	New Ulm, Minn.
UMV 1-18	5-8 July 1928	Berthold Agency, N. Dak.
UMV 1-20	11-16 July 1937	Baudette, Minn.
UMV 1-22	28-31 August 1941	Haywood, Wis.
UMV 1-25	15-19 September 1942	Woodville, Wis.

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Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
UMV 2-1	31 Dec 1896-3 Jan 1897	Pine Bluff, Ark.
UMV 2-3	11-15 September 1903	Reeds Landing, Minn.
UMV 2-4	24-26 March 1904	Willow Springs, Mo.
UMV 2-5	9-10 June 1905	Bonaparte, Ia.
UMV 2-6	16-19 October 1905	New Haven, Mo.
UMV 2-8	4-7 July 1909	Bethany, Mo.
UMV 2-9	10-15 August 1916	Louisiana, Mo.
UMV 2-14	12-15 June 1930	Washington, Ia.
UMV 2-15	28-29 June 1933	Gorin, Mo.
UMV 2-17	1-2 August 1929	Toledo, Ia.
UMV 2-18	12-19 September 1905	Boonville, Mo.
UMV 2-19	22 May 1941	Plainville, Ill.
UMV 2-20	1-2 August 1942	McChesney Airport, Ill.
UMV 2-21	8 September 1942	Iowa City, Ia.
UMV 2-22	25-26 July 1940	Gunder, Ia.
UMV 2-28	29-30 July 1942	Cedar Falls, Ia.
UMV 2-30	25-26 June 1944	Oxford Junction, Ia.
UMV 3-2	7-8 December 1916	Chester, Ill.
UMV 3-3	4-5 January 1917	Vincennes, Ind.
UMV 3-4	31 Mar-2 Apr. 1917	Dutton, Ark.
UMV 3-5	22-23 May 1918	Warrenton, Mo.
UMV 3-6 A	7-12 October 1919	Anahuac, Tex.
UMV 3-6 B	7-12 October 1919	Little Rock, Ark.
UMV 3-7 A	6-9 September 1920	Memphis, Tenn.
UMV 3-7 B	5-7 September 1920	Alva, Okla.
UMV 3-8	25-26 April 1921	Marshall, Tex.
UMV 3-9 A	2-3 September 1922	Harrisonville, Mo.
UMV 3-9 B	1 September 1922	Jackson, Mo.
UMV 3-10	27 December 1922	Benton, Ill.
UMV 3-14	25-26 June 1935	Clinton, Mo.
UMV 3-17	10-11 June 1938	Crystal Springs, Mo.
UMV 3-19	25 August 1939	St. Louis, Mo.
UMV 3-20	30 Sept-7 Oct. 1941	Davis, Okla.
UMV 3-20 (a)	30 Sept-7 Oct. 1941	Davis, Okla.
UMV 3-20 (b)	30 Sept-7 Oct. 1941	Galesburg, Ill.
UMV 3-20 (c)	30 Sept-7 Oct. 1941	LaPorte, Ind.
UMV 3-21	7-9 July 1942	Thompson Farm, Mo.
UMV 3-22	26-28 December 1942	Salem, Mo.

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Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
*UMV 3-28	15-16 July 1950	Mifflin, Wis.
UMV 3-29	25-26 June 1951	Dumont, Ia.
UMV 4-7	22-24 June 1919	Clinton, Ill.
UMV 4-11	18-20 August 1924	Galva, Ill.
UMV 4-12	17-19 May 1927	Peioria, Ill.
UMV 4-16	9-12 March 1939	Charleston, Ill.
GL 1-7	3-10 July 1902	Angelica, N. Y.
GL 1-9	25-30 August 1903	Strongsville, Ohio
GL 1-10	14-15 June 1908	North Rose, N. Y.
GL 1-11 A	2-5 June 1909	Benton Ridge, Ohio
GL 1-11 B	2-5 June 1909	Rome, Ohio
GL 1-15	14-19 May 1916	York, N. Y.
GL 1-16	2-5 June 1916	Brockport, N. Y.
GL 1-18	15-18 June 1920	West Newton, Pa.
GL 1-19	9-12 June 1922	Syracuse, N. Y.
GL 1-20	24-29 June 1924	Oberline, Ohio
GL 1-23	11-16 September 1925	Severance, N. Y.
GL 1-26	18-20 October 1930	Philadelphia, N. Y.
GL 1-27	20-25 July 1931	Conklingville, N. Y.
GL 2-1	17-22 June 1937	Buffalo, N. Y.
GL 2-8	16-21 December 1895	Three Rivers, Mich.
GL 2-12	3-8 June 1905	Medford, Wis.
GL 2-15	10-12 May 1914	Adrian, Mich.
GL 2-16	31 Aug-1 Sept. 1914	Cooper, Mich.
GL 2-17	13-14 March 1918	Trowbridge, Mich.
GL 2-19	5-11 April 1919	Oconto, Wis.
GL 2-21	8-11 June 1922	Wrightstown, Wis.
GL 2-22	3-6 August 1924	West Bend, Wis.
GL 2-27	9-14 February 1938	Lansing, Mich.
GL 2-29	19-24 July 1912	Merrill, Wis.
GL 2-30	21-23 July 1917	Viroqua, Wis.
GL 3-1	19-22 May 1912	Gladwin, Mich.
GL 3-2	8-10 August 1913	Bay City, Mich.
GL 3-5	31 Aug-3 Sept. 1937	Wolverine, Mich.

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Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
GL 3-11	29 June-1 July 1938	Libertyville, Ill.
GL 4-5	25-27 July 1897	Butternut, Wis.
GL 4-8	7-15 June 1903	Dover, N.J.
GL 4-9	7-11 October 1903	Paterson, N.J.
GL 4-11	30 June-5 July 1915	Greene, N.Y.
GL 4-12	7-8 July 1915	Mt. McGregor, N.Y.
GL 4-14	21-27 March 1916	Washington, Ia.
GL 4-15	18-21 July 1919	Bangorville, Ohio
GL 4-17	19-23 February 1922	West Branch, Mich.
GL 4-21	27-28 July 1928	High Falls, N.Y.
OR 1-1	4-9 July 1904	Gratiot, Ohio
OR 1-15	23-27 March 1913	Bellefontaine, Ohio
OR 1-27 (a)	1-4 September 1922	Oxford, Ohio
OR 1-27 (b)	1-4 September 1922	Moundsville, W. Va.
OR 2-6	3 July 1931	Oneonta, Ky.
OR 2-8	31 July-3 Aug. 1932	Lexington, Ky.
OR 3-7	12-15 July 1913	Toboso, Ohio
OR 3-10	12-15 March 1918	Holcomb, W. Va.
OR 3-12	29 Oct. 2 Nov. 1921	Marion, N.C.
OR 3-20	3-8 July 1932	Clay, W. Va.
OR 3-30	4-5 August 1943	Glenville, W. Va.
OR 4-1	25 July-3 Aug. 1875	Kenton, Ohio
OR 4-8	3-6 October 1910	Golconda, Ill.
OR 4-18	4-8 December 1924	Brownsville, Ky.
OR 4-22	8-9 September 1926	Charleston, Ill.
OR 5-5	20-21 June 1935	Greenville, Ky.
OR 5-6	5-25 January 1937	McKenzie, Tenn.
OR 5-8	28-31 March 1938	Fords Ferry, Ky.
OR 5-9	28 July-2 Aug. 1938	Mayfield, Ky.
OR 5-11	2-18 February 1883	Wellsboro, Pa.
OR 6-23	21-24 January 1920	Pontotoc, Miss.
OR 7-10	28-30 June 1928	Clinton, Tenn.
OR 7-15	21-23 March 1929	Rock Island, Tenn.
OR 8-16 A	14-18 June 1912	Fairfield, Ill.
OR 8-16 B	14-18 June 1912	Johnstown, Pa.
OR 9-11	6-7 August 1935	Keene, Ohio

STORM RAINFALL IN THE UNITED STATES
DEPTH-AREA-DURATION DATA

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(continued)

2 January 1962

Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
OR 9-19	10-13 September 1878	Jefferson, Ohio
OR 9-23	17-18 July 1942	Port Allegheny, Pa.
MR 1-1	16-20 December 1895	Phillipsburg, Mo.
MR 1-3 A	6-7 July 1898	Blanchard, Ia.
MR 1-3 B	7-8 July 1898	Edgehill, Mo.
MR 1-5	14-17 July 1900	Primghar, Ia.
MR 1-6	4-8 September 1901	Ness City, Kans.
MR 1-8	20-24 September 1902	Wakeeney, Kans.
MR 1-9	25-31 May 1903	Abilene, Kans.
MR 1-10	24-28 August 1903	Woodburn, Ia.
MR 1-11	7-10 September 1903	Burlington, Kans.
MR 1-16 A	28 June-2 July 1905	El Dorado, Kans.
MR 1-16 B	28 June-2 July 1905	Arkadelphia, Ark.
MR 1-20	30 May-1 June 1906	Yates Center, Kans.
MR 1-21 A	22-26 August 1906	Warsaw, Mo.
MR 1-21 B	21-25 August 1906	Hartington, Nebr.
MR 1-23	13-16 July 1907	Nemaha, Nebr.
MR 1-24	4-10 June 1908	Shawnee, Okla.
MR 1-28	6-9 September 1909	Topeka, Kans.
MR 1-29	10-16 November 1909	Neosho, Mo.
MR 1-30	6-11 June 1910	Boonville, Mo.
MR 2-3	6-7 September 1911	Wichita, Kans.
MR 2-5	20-25 June 1913	Lacona, Ia.
MR 2-7	25-29 May 1915	Lexington, Mo.
MR 2-9	11-16 July 1915	Maryville, Mo.
MR 2-11	6-9 September 1915	Moran, Kans.
MR 2-12	4-6 June 1916	Newkirk, Okla.
MR 2-13	26-31 January 1916	Ironton, Mo.
MR 2-15	10-12 September 1916	Cunningham, Kans.
MR 2-16	1-6 June 1917	Atlantic, Ia.
MR 2-18	6-8 November 1918	Neosho, Mo.
MR 2-19	14-16 March 1919	Atchison, Kans.
MR 2-20	2-4 May 1919	Conception, Mo.
MR 2-21	30 May-4 June 1919	Corydon, Ia.
MR 2-22	25-29 August 1919	Warrensburg, Mo.
MR 2-23	16-19 September 1919	Bruning, Nebr.

STORM RAINFALL IN THE UNITED STATES
DEPTH-AREA-DURATION DATA

TABLE OF CONTENTS
(continued)

2 January 1962

Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
MR 2-28	6-11 April 1922	Warsaw, Mo.
MR 2-29	9-12 July 1922	Grant City, Mo.
MR 3-1 A	29 Sept-2 Oct. 1923	Medicine Lodge, Kans.
MR 3-1 B	29 Sept-2 Oct. 1923	Woodward, Okla.
MR 3-3	11-14 July 1924	Ft. Scott, Kans.
MR 3-4	1-3 June 1925	St. Joseph, Mo.
MR 3-5	14-18 June 1925	Horton, Kans.
MR 3-6	20-22 September 1925	Lockwood, Mo.
MR 3-7	10-17 June 1926	Lacona, Ia.
MR 3-8	31 Aug.-5 Sept. 1926	Clarinda, Ia.
MR 3-10 (a)	17-20 March 1927	Tuscumbia, Mo.
MR 3-10 (b)	17-20 March 1927	Lutherville, Ark.
MR 3-11	7-9 April 1927	Chanute, Kans.
MR 3-12	7-8 August 1927	Caplinger Mills, Mo.
MR 3-13	11-14 August 1927	Bison, Kans.
MR 3-14	28 Sept.-2 Oct. 1927	Dutton, Ark.
MR 3-15	16-21 June 1928	Mexico, Mo.
MR 3-16	7-8 July 1928	Lincoln, Kans.
MR 3-17	18-21 July 1928	Mt. Ayr, Ia.
MR 3-18	28-30 July 1928	Wakeeny, Kans.
MR 3-19	10-14 September 1928	Centerville, Ia.
MR 3-20	15-17 November 1928	Lebo, Kans.
MR 3-21	7-9 April 1929	Lockwood, Mo.
MR 3-24	17-18 May 1929	Stover, Mo.
MR 3-25	29 May-3 June 1929	Bethany, Mo.
MR 3-26 A	13-14 September 1930	Holton, Kans.
MR 3-26 B	14-15 September 1930	Neosho, Mo.
MR 3-27	17-18 October 1934	Sedan, Kans.
MR 3-28 A	30-31 May 1935	Colorado Springs, Colo.
MR 3-28 B	27 May - 2 June 1935	Chanute, Kans.
MR 3-29	30-31 May 1938	Sharon Springs, Kans.
MR 4-2	23-27 June 1891	Larrabee, Ia.
MR 4-3	4-7 June 1896	Greeley, Nebr.
MR 4-5	3-4 June 1940	Grant Township, Nebr.
MR 4-6	1-3 May 1904	Boxelder, Colo.
MR 4-8	2-5 June 1904	Spearfish, S. Dak.
MR 4-10	12-13 June 1907	Ft. Meade, S. Dak.
MR 4-12	28-30 August 1910	Lincoln, Nebr.

STORM RAINFALL IN THE UNITED STATES
DEPTH-AREA-DURATION DATA

TABLE OF CONTENTS
(continued)

2 January 1962

Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
MR 4-14 A	25-28 June 1914	Hazelon, N. Dak.
MR 4-14 B	25-28 June 1914	Morris, Minn.
MR 4-16	19-22 August 1918	Mayville, N. Dak.
MR 4-17	9-12 May 1920	Vale, S. Dak.
MR 4-18	16-17 July 1920	Oakdale, Nebr.
MR 4-19	14-16 April 1921	Silver Lake, Colo.
MR 4-21	17-21 June 1921	Springbrook, Mont.
MR 4-22	22-26 July 1923	Sheridan, Wyo.
MR 4-23	27 Sept-1 Oct. 1923	Savageton, Wyo.
MR 4-24	17-19 September 1926	Boyden, Ia.
MR 4-25	5-9 May 1927	Belvidere, S. Dak.
MR 4-27	25-30 May 1929	Sentinel Butte, N. Dak.
MR 4-28	6-7 June 1929	Beach, N. Dak.
MR 5-2	6-8 June 1934	Akron, Iowa
MR 5-6	17-20 May 1938	Big Timber, Mont.
MR 5-8	30 Aug.-4 Sept. 1938	Loveland, Colo.
MR 5-9	29 June-1 July 1898	Adel, Mont.
MR 5-10	22-24 April 1900	Big Timber, Mont.
MR 5-11	11-13 May 1900	Canyon Ferry, Mont.
MR 5-12	19-20 May 1902	Kipp, Mont.
MR 5-13	6-8 June 1906	Warrick, Mont.
MR 5-14	21-23 June 1907	Choteau, Mont.
MR 5-15	3-6 June 1908	Evans, Mont.
MR 5-17	7-8 June 1910	Half Moon Pass, Mont.
MR 5-18	3-6 September 1911	Knobles Ranch, Mont.
MR 5-19	11-14 April 1912	Arnegard, N. Dak.
MR 5-20	12-14 June 1914	Malta, Mont.
MR 5-21	1-5 June 1915	Adel, Mont.
MR 5-23	14-15 July 1918	Pine Grove, Mont.
MR 5-24	27-28 September 1919	Browning, Mont.
MR 5-25	16-21 June 1923	Hayes, Mont.
MR 5-29	11-13 June 1937	Circle, Mont.
MR 6-1	23-26 June 1942	Clifton Hill, Mo.
MR 6-2	18-22 October 1941	Lindsborg, Kans.
MR 6-3	3-4 June 1943	Ballard, Mo.
MR 6-11	13-17 March 1943	Dooley, Mont.
MR 6-13	10-12 May 1944	Pierce, Nebr.
MR 6-14	29-31 May 1894	Ward District, Colo.
MR 6-15	10-13 June 1944	Stanton, Nebr.
MR 6-15 (a)	10-13 June 1944	Turkey Ridge, S. Dak.
MR 6-16	1-2 August 1944	Bagnell, Mo.

STORM RAINFALL IN THE UNITED STATES
DEPTH-AREA-DURATION DATA

TABLE OF CONTENTS
(continued)

2 January 1962

Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
MR 6-20	6-8 September 1941	Campbell Farm, Mont.
MR 7-2 A	12-15 August 1946	Cole Camp, Mo.
MR 7-2 B	12-16 August 1946	Collinsville, Ill.
MR 7-9	16-17 July 1946	Jerome, Ia.
MR 7-16	17-18 June 1947	Gering, Nebr.
MR 7-18	30 May 1948	Ft. Collins, Colo.
MR 7-19	7 June 1948	Golden, Colo.
MR 8-6	25-30 May 1947	Plattsmouth, Nebr.
MR 8-8	31 May-1 June 1947	Leigh, Nebr.
MR 8-10	2-7 June 1947	Browning, Mo.
MR 8-12	7-10 June 1947	Niobrara, Nebr.
MR 8-14	10-13 June 1947	Earlham, Iowa
MR 8-16	13-16 June 1947	Sioux City, Iowa
MR 8-18	16-18 June 1947	Brookfield, Mo.
MR 8-20	18-23 June 1947	Holt, Mo.
MR 8-22	23-26 June 1947	Annapolis, Mo.
MR 8-24	26-30 June 1947	Lathrop, Mo.
MR 8-26	30 June-1 July 1947	Lockwood, Mo.
MR 8-30	4-6 July 1947	Freeport, Ill.
MR 10-2	9-13 July 1951	Council Grove, Kans.
MR 10-7	27-28 July 1951	Marsland, Nebr.
SW 1-1	25-29 May 1893	Marianna, Ark.
SW 1-2	2-6 May 1898	Norman, Okla.
SW 1-4	28 Sept.-1 Oct 1903	Gainesville, Tex.
SW 1-5	1-5 June 1904	Hartshorne, Okla.
SW 1-6	26-30 September 1904	Rociada, N. Mex.
SW 1-7	18-21 July 1905	Hartshorne, Okla.
SW 1-7 (a)	18-21 July 1905	Lockwood, Mo.
SW 1-7 (b)	18-21 July 1905	Hartshorne, Okla.
SW 1-8	4-9 August 1906	Pauls Valley, Okla.
SW 1-10	21-25 May 1908	Chattanooga, Okla.
SW 1-10 (a)	21-25 May 1908	Chattanooga, Okla.
SW 1-10 (b)	21-25 May 1908	Sabinal, Tex.
SW 1-11	19-24 October 1908	Meeker, Okla.
SW 1-14	6-12 June 1913	Ft. Union, N. Mex.
SW 1-16	29 Apr.-2 May 1914	Clayton, N. Mex.
SW 1-18	19-28 July 1915	Tajique, N. Mex.

STORM RAINFALL IN THE UNITED STATES
DEPTH-AREA-DURATION DATA

TABLE OF CONTENTS
(continued)

2 January 1962

Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
*SW 1-23	2-6 June 1921	Peublo, Colo.
SW 1-24	16-19 November 1921	Searcy, Ark.
SW 1-25	5-11 June 1923	Wichita, Kans.
SW 1-26	13-20 Sept. 1923	Smithville, Okla.
SW 1-27	11-16 October 1923	Mangum, Okla.
SW 1-27 (a)	11-16 October 1923	Mangum, Okla.
SW 1-27 (b)	11-16 October 1923	Austin, Tex.
SW 1-29	23-26 September 1925	Freeman Springs, Ark.
SW 1-30	2-5 September 1926	Columbus, Kans.
SW 2-1	11-16 September 1926	Neosho Falls, Kans.
SW 2-2	25-30 September 1926	Eufaula, Okla.
SW 2-4	17-21 April 1927	Jessieville, Ark.
SW 2-5	12-15 July 1927	Ardmore, Okla.
SW 2-6	9-12 October 1930	Porter, N. Mex.
SW 2-7	2-6 June 1932	Meeker, Okla.
SW 2-7 (a)	2-6 June 1932	Tribune, Kans.
SW 2-8	15-17 August 1932	Enid, Okla.
SW 2-9	21-24 December 1932	Sulphur, Okla.
SW 2-10	15-20 December 1933	Stuttgart, Ark.
SW 2-11	3-4 April 1934	Cheyenne, Okla.
SW 2-13	12-18 June 1935	Waldron, Ark.
SW 2-15	6-10 September 1937	Bentonville, Ark.
SW 2-15 (a)	6-10 September 1937	Bentonville, Ark.
SW 2-15 (b)	6-10 September 1937	Cherokee, Okla.
SW 2-17	14-19 February 1938	Calvin, Okla.
SW 2-18	2-6 September 1940	Hallett, Okla.
SW 2-19	13-19 April 1941	Haskell, Okla.
SW 2-20	6-12 May 1943	Warner, Okla.
SW 2-21	12-20 May 1943	Mounds, Okla.
SW 2-23	18-19 October 1908	May Valley, Colo.
SW 2-24	2-7 June 1915	Henrietta, Tex.
*SW 2-27	6-11 August 1929	Valmora, N. Mex.
*SW 2-28	20-23 September 1929	Gallinas, N. Mex.
*SW 2-29	29 Aug.-1 Sept. 1942	Maxwell, N. Mex.
SW 2-30	4-6 October 1911	Gladstone, Colo.
*SW 3-1	27-29 September 1941	Tularosa, N. Mex.
SW 3-3	5-7 June 1943	Silver Lake, Tex.
SW 3-4	29 April-4 May 1944	Pollock, Tex.
SW 3-5	28 March-2 April 1945	Van, Tex.
SW 3-6	17-21 April 1942	Kenton, Okla.

STORM RAINFALL IN THE UNITED STATES
DEPTH-AREA-DURATION DATA

TABLE OF CONTENTS
(continued)

2 January 1962

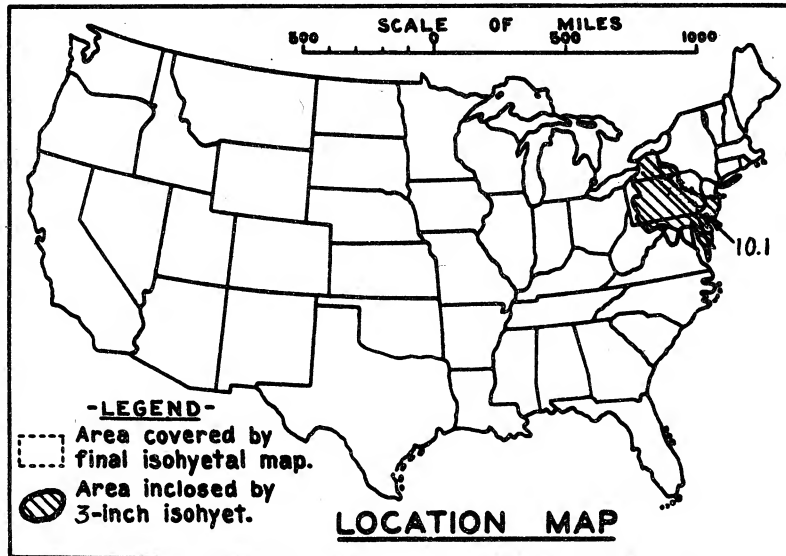
Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
SW 3-7 A	27-28 August 1947	Wickes, Ark.
SW 3-7 B	24-27 August 1947	Dallas, Tex.
SW 3-10	22-27 January 1949	Timbo, Ark.
SW 3-22	23-28 June 1954	Vic. Pierce, Tex.
GM 1-19	5-10 July 1916	Bonifay, Fla.
GM 1-22	6-10 December 1919	Norcross, Ga.
GM 2-11	8-14 December 1932	Edinburg, Miss.
GM 2-25	5-9 April 1938	Lock #2, Ala.
GM 3-4	27 June-1 July 1899	Hearne, Tex.
GM 3-11	24-26 October 1904	Weatherford, Tex.
GM 3-13	21-25 July 1905	Elk, N. Mex.
GM 3-14	4-6 August 1906	Knickerbocker, Tex.
GM 3-25	1-5 December 1913	San Marcos, Tex.
GM 3-26	24-28 April 1914	Merryville, La.
GM 4-1	22-26 April 1915	Austin, Tex.
GM 4-12	8-10 September 1921	Thrall, Tex.
GM 4-15	24-27 April 1922	Weatherford, Tex.
GM 4-21	27-29 May 1925	Eagle Pass, Tex.
GM 4-26	25-30 May 1929	Henly, Tex.
GM 5-1	30 June-2 July 1932	State Fish Hatchery, Tex.
GM 5-2	10-15 June 1935	Segovia, Tex.
GM 5-3	2-7 September 1935	Ballinger, Tex.
GM 5-4	5-8 December 1935	Satsuma, Tex.
GM 5-5	22-28 May 1936	La Grange, Tex.
GM 5-6	27 June-4 July 1936	Bebe, Tex.
GM 5-7	14-18 September 1936	Broome, Tex.
GM 5-8	25-28 September 1936	Hillsboro, Tex.
GM 5-10	19-25 July 1938	Eldorado, Tex.
GM 5-11	28-30 June 1940	Engle, Tex.
GM 5-12	2-6 July 1942	Spring Branch, Tex.
GM 5-13	22-25 November 1940	Hempstead, Tex.
GM 5-15 A	14-15 September 1919	George West, Tex.
GM 5-15 B	15-17 September 1919	Meek, N. Mex.
GM 5-16 A	30 Aug.-5 Sept. 1932	Fairfield, Tex.
GM 5-16 B	5-7 September 1932	Abilene, Tex.
GM 5-17	26-30 May 1937	Ragland, N. Mex.
GM 5-18	20-25 May 1941	Prairieview, N. Mex.

STORM RAINFALL IN THE UNITED STATES
DEPTH-AREA-DURATION DATA

TABLE OF CONTENTS
(continued)

2 January 1962

Basic Assignment Number	Date of Storm	Approximate Location of Maximum Center
GM 5-19	20-23 September 1941	Dave McColleum Ranch, N. Mex.
GM 5-20	31 May 1935	Woodward Ranch, Tex.
GM 5-21	27-29 July 1943	Devers, Tex.
GM 5-22	6-8 November 1943	Frisco City, Ala.
GM 5-23	26-29 August 1945	Hockley, Tex.
GM 5-24	26-27 September 1946	San Antonio, Tex.
NP 4-6	18-23 November 1909	Rattlesnake, Idaho

STORM STUDIES - PERTINENT DATA SHEET

Storm of May 17-22 1894
 Assignment N A 1 - 4
 Location Penna, and N. J.
 Study Prepared by:

North Atlantic Division
 Philadelphia District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/26/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/5/45

Remarks: Centers at:

Bridgeton, N. J. and
 Cassandra, Penna.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	6
Form 5001-B (24-hour " ")-----	131
Form 5001-D (" " " ")-----	--
Misc. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	36

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

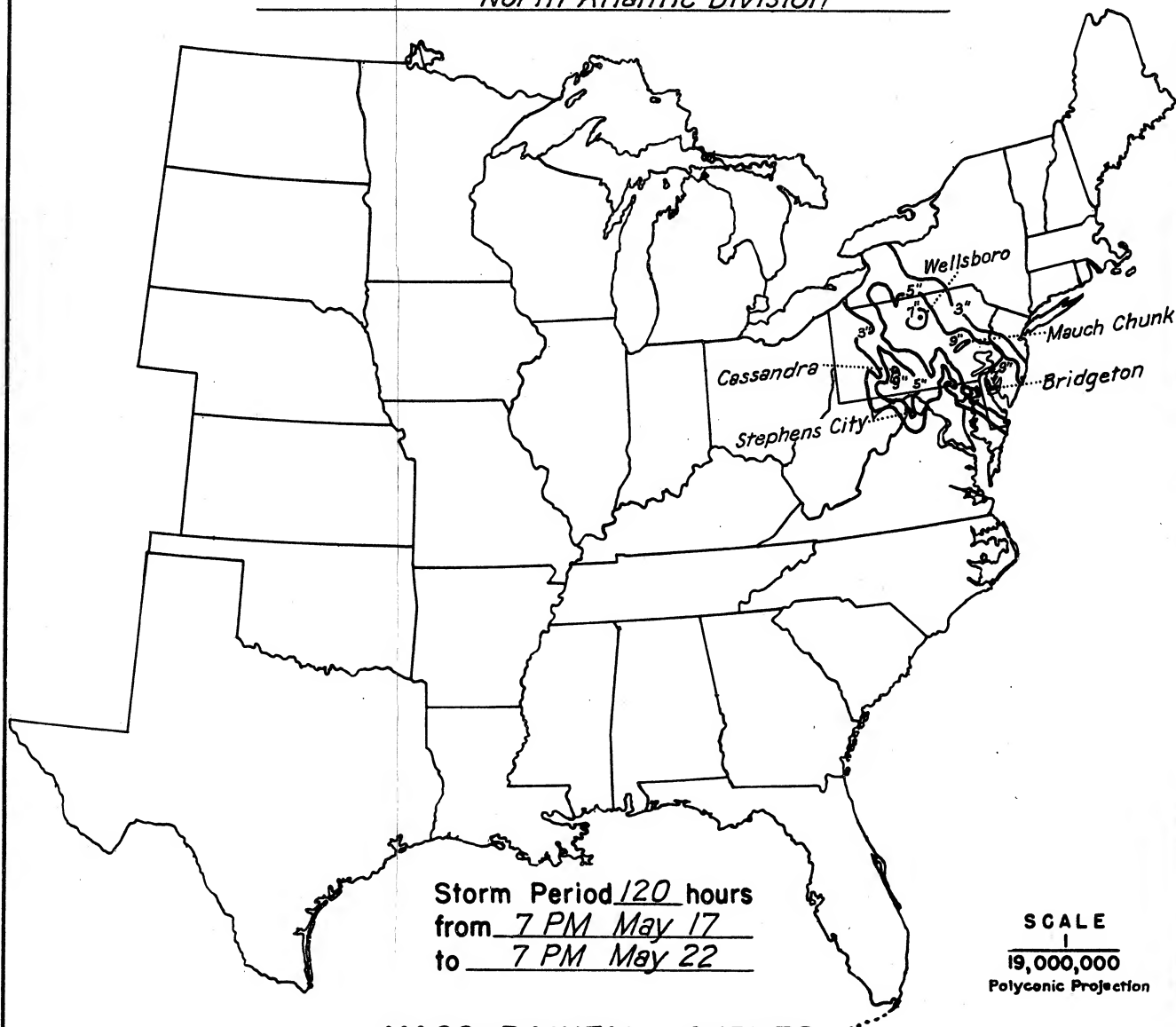
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

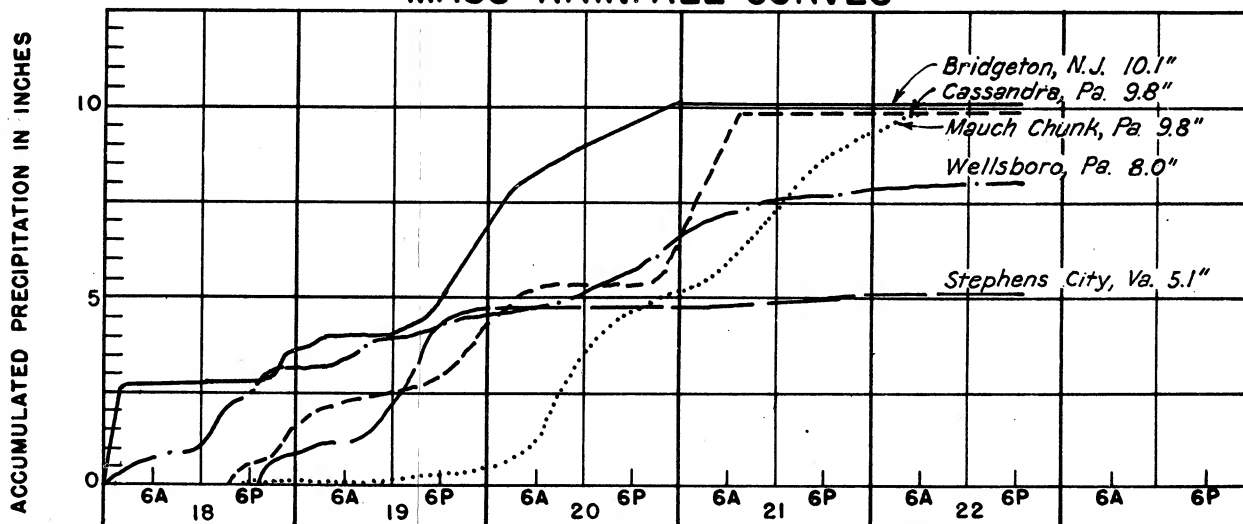
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	3.3	5.3	6.2	7.0	8.2	8.7	9.3	9.5	10.0	10.1	10.1
100	2.8	4.6	5.4	6.1	7.3	7.8	8.7	9.2	9.6	9.8	9.8
200	2.6	4.4	5.1	5.8	6.9	7.5	8.5	9.1	9.5	9.6	9.6
500	2.4	4.0	4.8	5.4	6.5	7.2	8.2	8.8	9.1	9.4	9.4
1,000	2.2	3.7	4.5	5.1	6.2	6.8	7.9	8.5	8.8	9.2	9.2
2,000	1.9	3.3	4.3	4.8	5.8	6.5	7.6	8.2	8.4	8.9	8.9
5,000	1.6	2.8	3.8	4.4	5.3	6.1	7.1	7.6	7.8	8.3	8.4
10,000	1.4	2.4	3.4	4.0	4.8	5.5	6.5	7.0	7.2	7.7	7.8
20,000	1.1	2.0	2.8	3.4	4.1	4.7	5.6	6.1	6.4	6.9	7.1
50,000	0.8	1.5	2.0	2.6	3.0	3.4	4.1	4.5	4.9	5.5	5.7
57,000	0.7	1.4	1.9	2.4	2.8	3.2	3.8	4.2	4.6	5.2	5.4

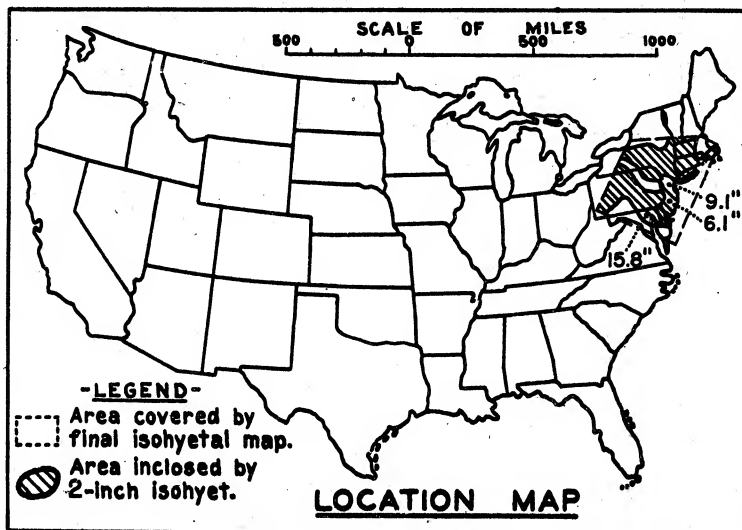
STORM STUDIES - ISOHYETAL MAP

Storm of May 17-22 1894 Assignment NA 1-4
Study Prepared by: Philadelphia, Penna. District
North Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 26-29 July 1897

Assignment NA 1-7

Location Northeast U. S.

Study Prepared by:

North Atlantic Division

New York District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 3/1/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/27/46

Remarks: TOTAL STORM

Centers at

Jewell, Md., Elizabeth and
Clayton, N. J.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	13
Form 5001-B (24-hour " ")-----	74
Form 5001-D (" " " ")-----	--
Misc. precip. records, meteorological data, etc.-----	3
Form 5002 (Mass rainfall curves)-----	42

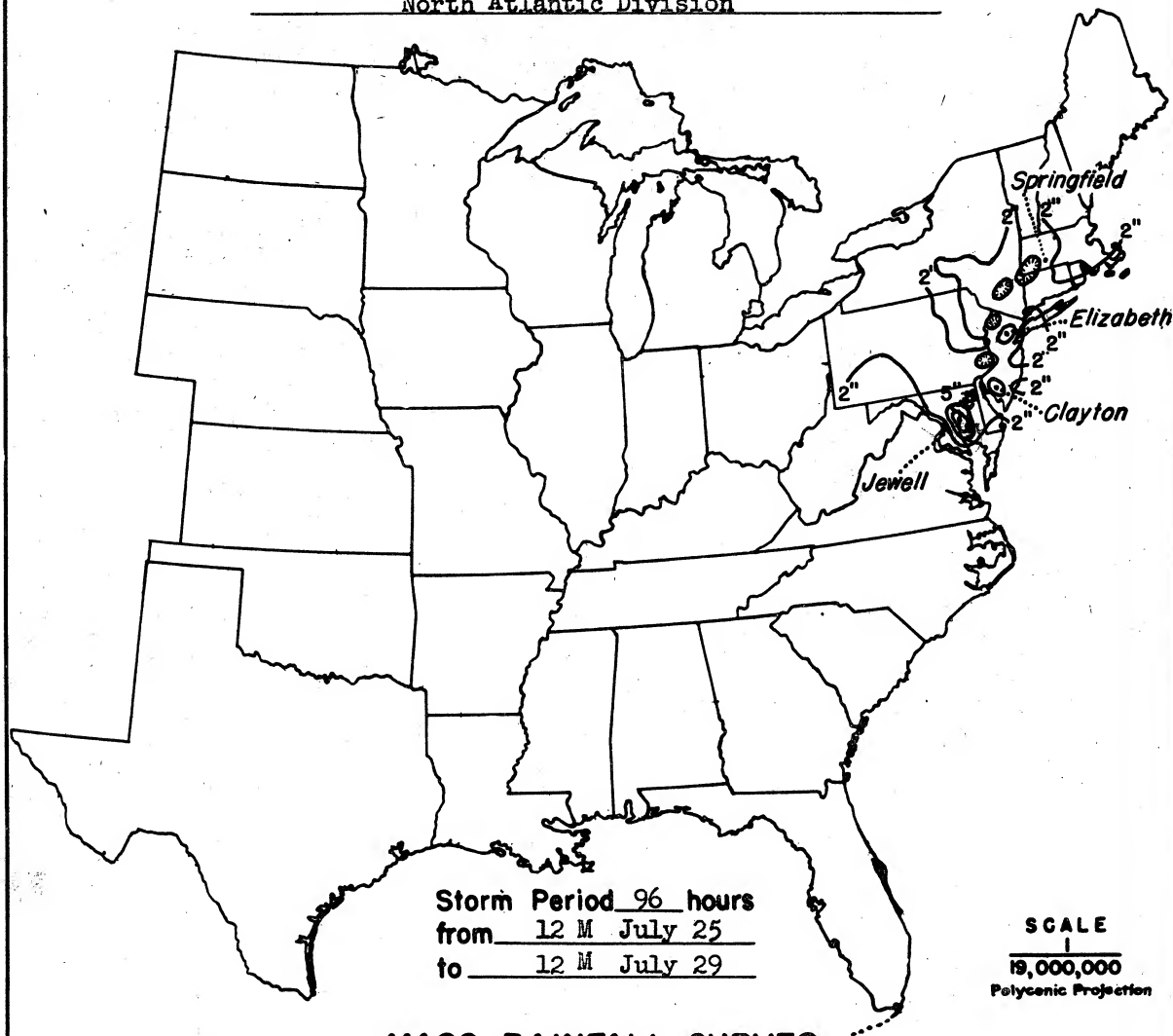
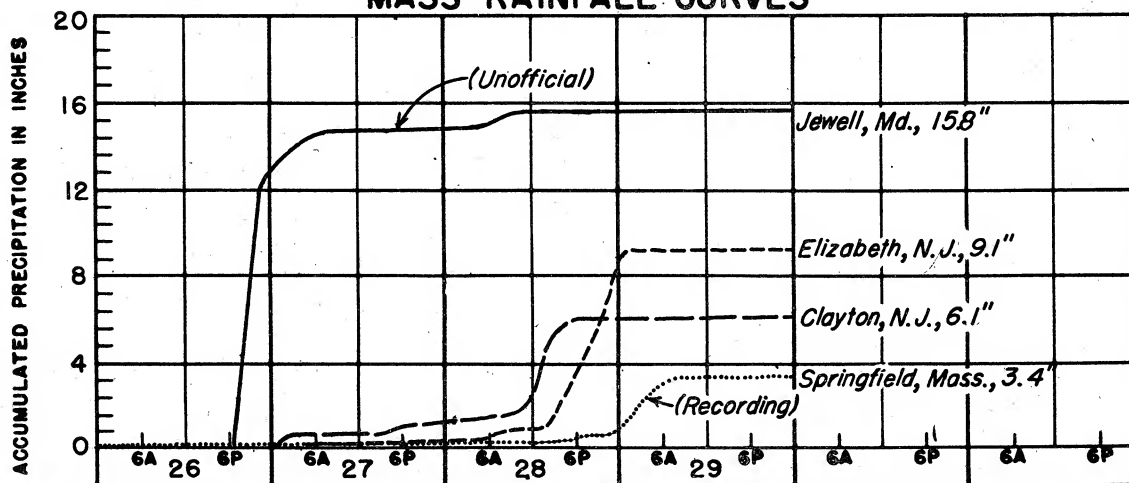
PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

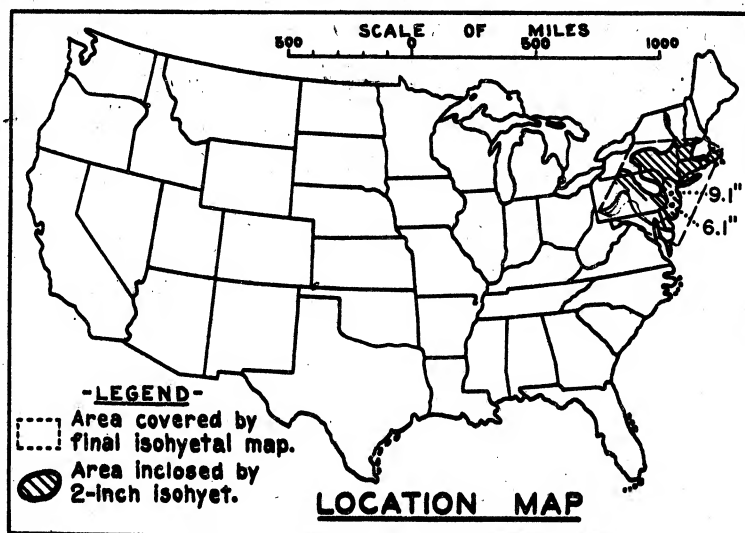
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	3
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	13.0	14.5	14.7	14.7	14.7	14.7	15.8	15.8	15.8	15.8
100	10.5	11.7	11.9	11.9	11.9	11.9	12.8	12.8	12.8	12.8
200	9.4	10.5	10.6	10.6	10.6	10.6	11.5	11.5	11.5	11.5
500	7.5	8.3	8.5	8.5	8.5	8.5	9.2	9.2	9.2	9.2
1,000	5.5	6.0	6.2	6.2	6.2	6.2	7.0	7.0	7.0	7.0
2,000	3.7	4.2	4.5	4.6	4.7	4.7	5.2	5.2	5.2	5.2
5,000	2.3	3.1	3.3	3.3	3.4	3.7	3.8	3.9	4.0	4.1
10,000	1.5	2.6	2.8	2.9	2.9	3.3	3.5	3.6	3.7	3.8
20,000	1.1	2.1	2.4	2.5	2.6	3.0	3.2	3.5	3.6	3.6
32,000	0.9	1.7	1.9	2.0	2.1	2.5	2.8	3.3	3.4	3.4

STORM STUDIES - ISOHYETAL MAPStorm of July 26-29, 1897Assignment NA 1-7Study Prepared by: New York, N. Y. DistrictNorth Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 26-29 July 1897

Assignment NA 1-7 (a)

Location Northeast U. S.

Study Prepared by:

North Atlantic Division
New York District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 3/1/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/27/46Remarks: Northern Area Only
Centers at
Elizabeth and Clayton, N.J.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	<u>13</u>
Form 5001-B (24-hour " " " ").....	<u>74</u>
Form 5001-D (" " " ").....	<u>—</u>
Misc. precip. records, meteorological data, etc.....	<u>3</u>
Form 5002 (Mass rainfall curves).....	<u>42</u>

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

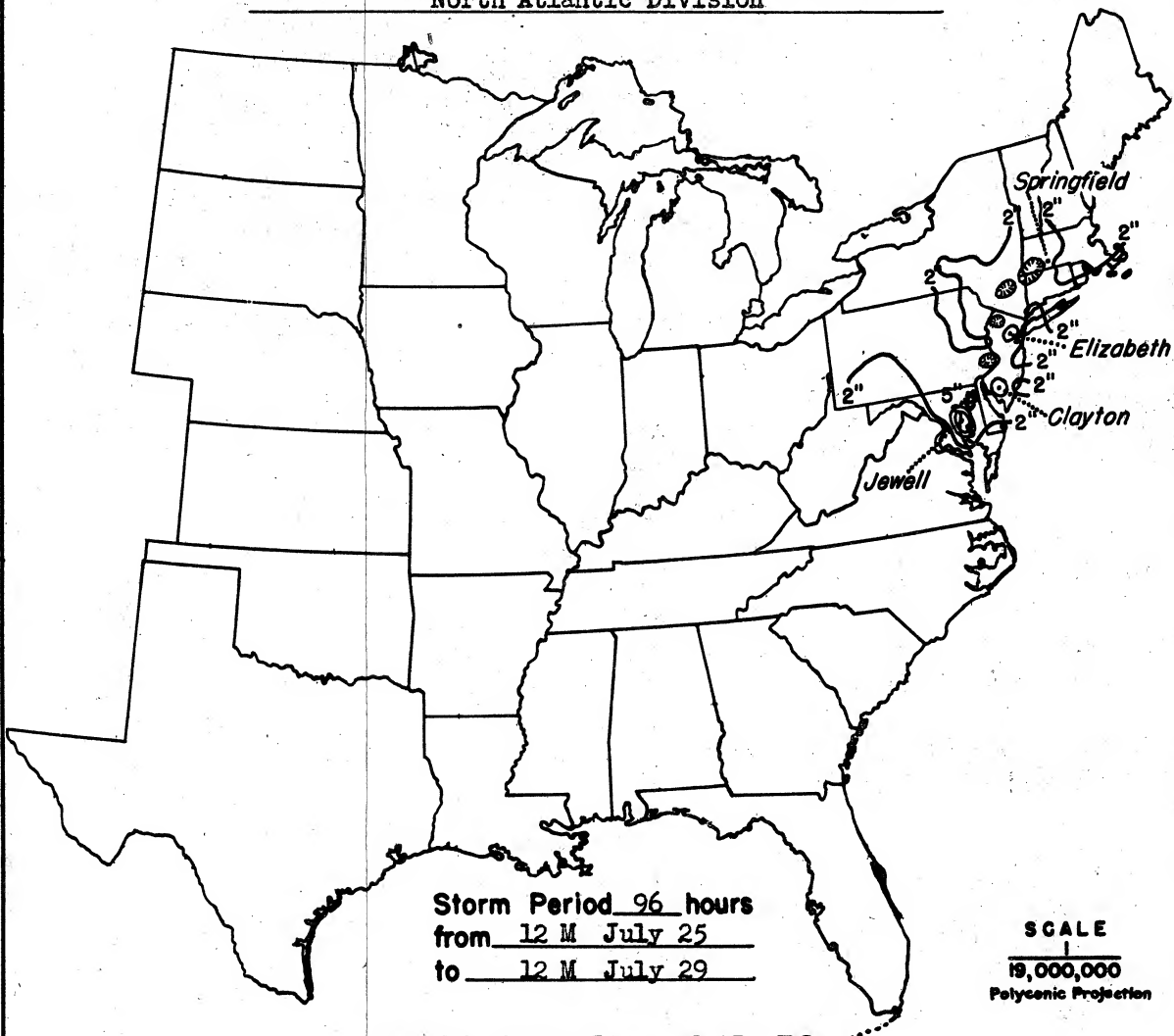
Form S-10 (Data from mass rainfall curves).....	<u>5</u>
Form S-11 (Depth-area data from isohyetal map).....	<u>2</u>
Form S-12 (Maximum depth-duration data).....	<u>5</u>
Maximum duration-depth-area curves.....	<u>3</u>
Data relating to periods of maximum rainfall.....	<u>2</u>

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

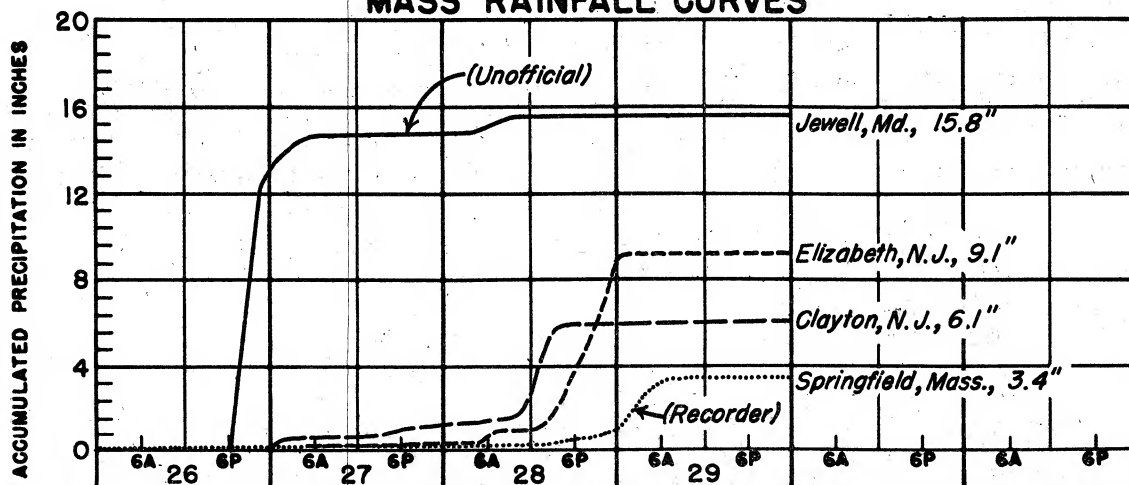
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	6.2	8.1	8.6	8.7	8.9	9.0	9.0	9.1	9.1	9.1
100	4.3	7.3	7.5	7.8	7.9	8.0	8.0	8.1	8.1	8.1
200	3.8	6.6	6.8	7.0	7.1	7.2	7.3	7.3	7.3	7.3
500	3.1	5.5	5.7	5.9	6.0	6.1	6.2	6.3	6.3	6.3
1,000	2.8	4.6	4.8	4.9	5.1	5.2	5.3	5.4	5.5	5.5
2,000	2.4	3.9	4.0	4.1	4.3	4.4	4.5	4.6	5.1	5.1
5,000	1.9	3.1	3.3	3.3	3.4	3.7	3.8	3.9	4.0	4.1
10,000	1.5	2.6	2.8	2.9	2.9	3.3	3.4	3.5	3.6	3.7
20,000	1.1	2.1	2.4	2.5	2.6	2.9	3.1	3.2	3.3	3.4
26,000	1.0	1.9	2.1	2.2	2.3	2.8	3.0	3.2	3.3	3.3

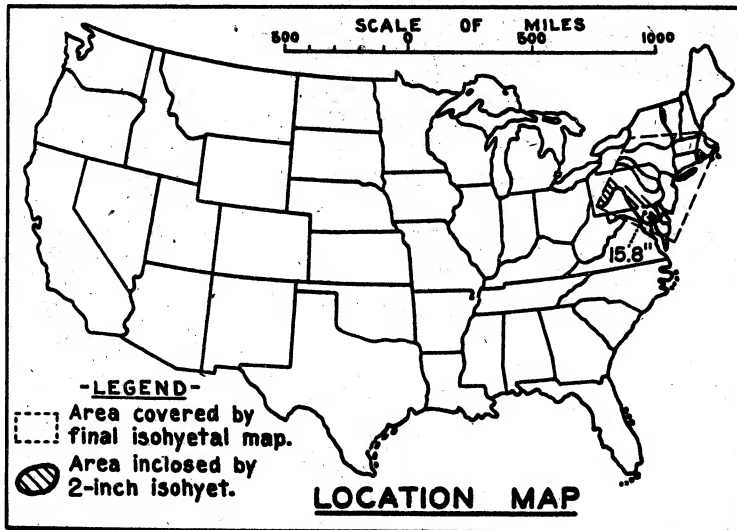
STORM STUDIES - ISOHYETAL MAP

Storm of July 26-29, 1897 Assignment NA 1-7 (a)
Study Prepared by: New York, N. Y. District
North Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 26-29 July 1897

Assignment NA 1-7 (b)

Location Northeast U. S.

Study Prepared by:

North Atlantic Division
New York District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 3/1/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/27/46Remarks: Southern Area Only
Center at
Jewell, Md.N 38° 15'
W 76° 37'**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	<u>13</u>
Form 5001-B (24-hour " ").....	<u>74</u>
Form 5001-D (" " " ").....	<u>--</u>
Misc. precip. records, meteorological data, etc.....	<u>3</u>
Form 5002 (Mass rainfall curves).....	<u>42</u>

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

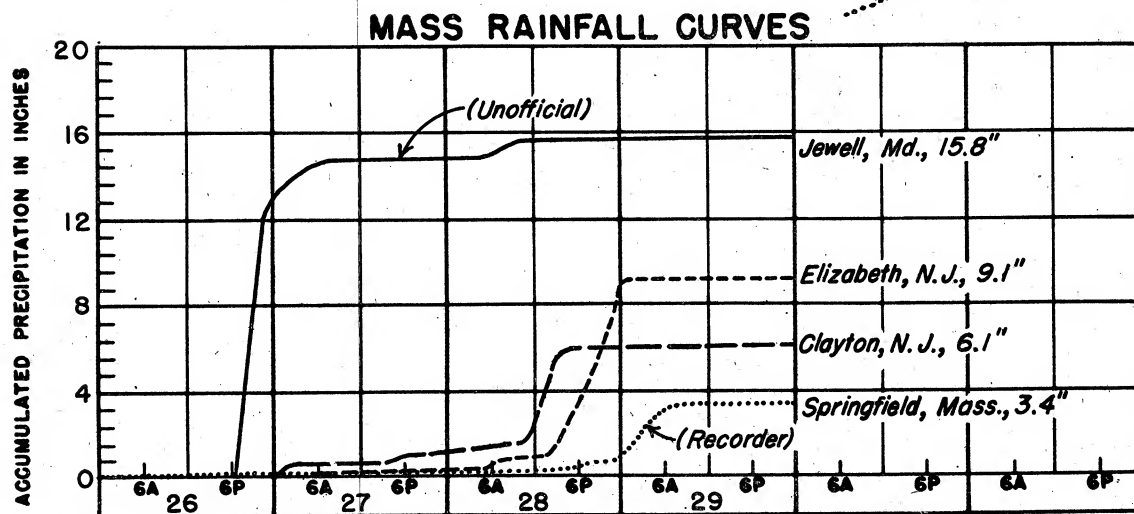
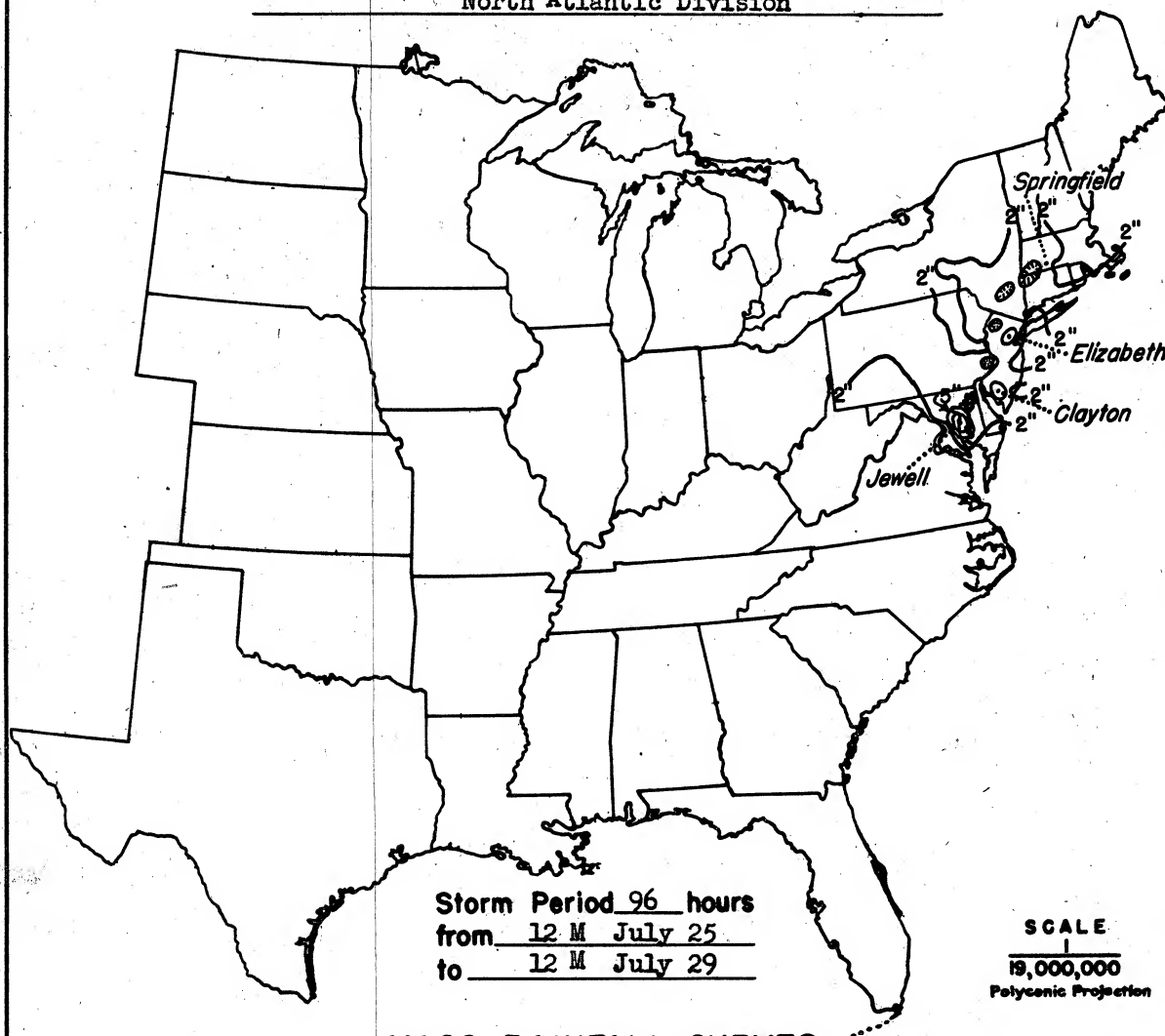
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	<u>5</u>
Form S-11 (Depth-area data from isohyetal map).....	<u>2</u>
Form S-12 (Maximum depth-duration data).....	<u>5</u>
Maximum duration-depth-area curves.....	<u>3</u>
Data relating to periods of maximum rainfall.....	<u>2</u>

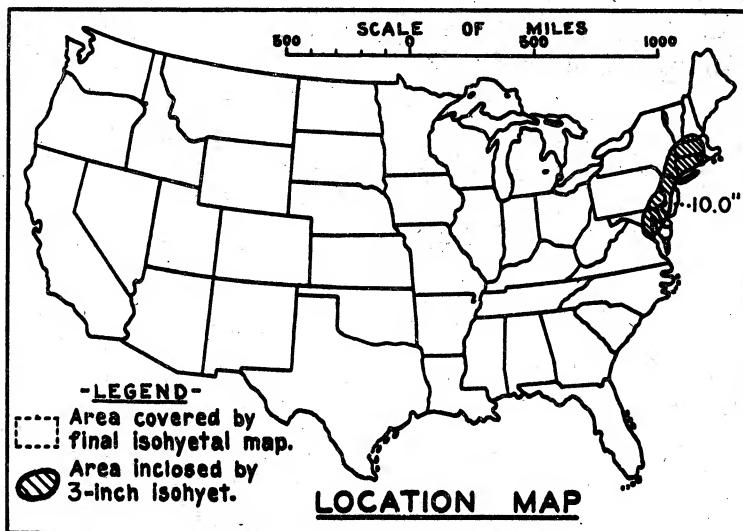
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	13.0	14.5	14.7	14.7	14.7	14.7	15.8	15.8	15.8	15.8
100	10.5	11.7	11.9	11.9	11.9	11.9	12.8	12.8	12.8	12.8
200	9.4	10.5	10.6	10.6	10.6	10.6	11.5	11.5	11.5	11.5
500	7.5	8.3	8.5	8.5	8.5	8.5	9.2	9.2	9.2	9.2
1,000	5.5	6.0	6.2	6.2	6.2	6.2	7.0	7.0	7.0	7.0
2,000	3.7	4.2	4.5	4.6	4.7	4.7	5.2	5.2	5.2	5.2
5,000	2.3	2.7	3.0	3.1	3.2	3.2	3.6	3.7	3.7	3.7
6,000	2.0	2.5	2.7	2.9	2.9	3.0	3.4	3.4	3.4	3.5

Storm of July 26-29, 1897 Assignment NA 1-7 (b)
Study Prepared by: New York, N. Y. District
North Atlantic Division



STORM STUDIES - PERTINENT DATA SHEET



Storm of 12-15 September 1904

Assignment NA 1-9

Location New England

Study Prepared by:

North Atlantic Division

Philadelphia District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8-4-42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4-16-46Remarks: Center at
Friesburg, N. J.

DATA AND COMPUTATIONS COMPILED

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	10
Form 5001-B (24-hour " ")-----	177
Form 5001-D (" " " ")-----	--
Misc. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	40

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

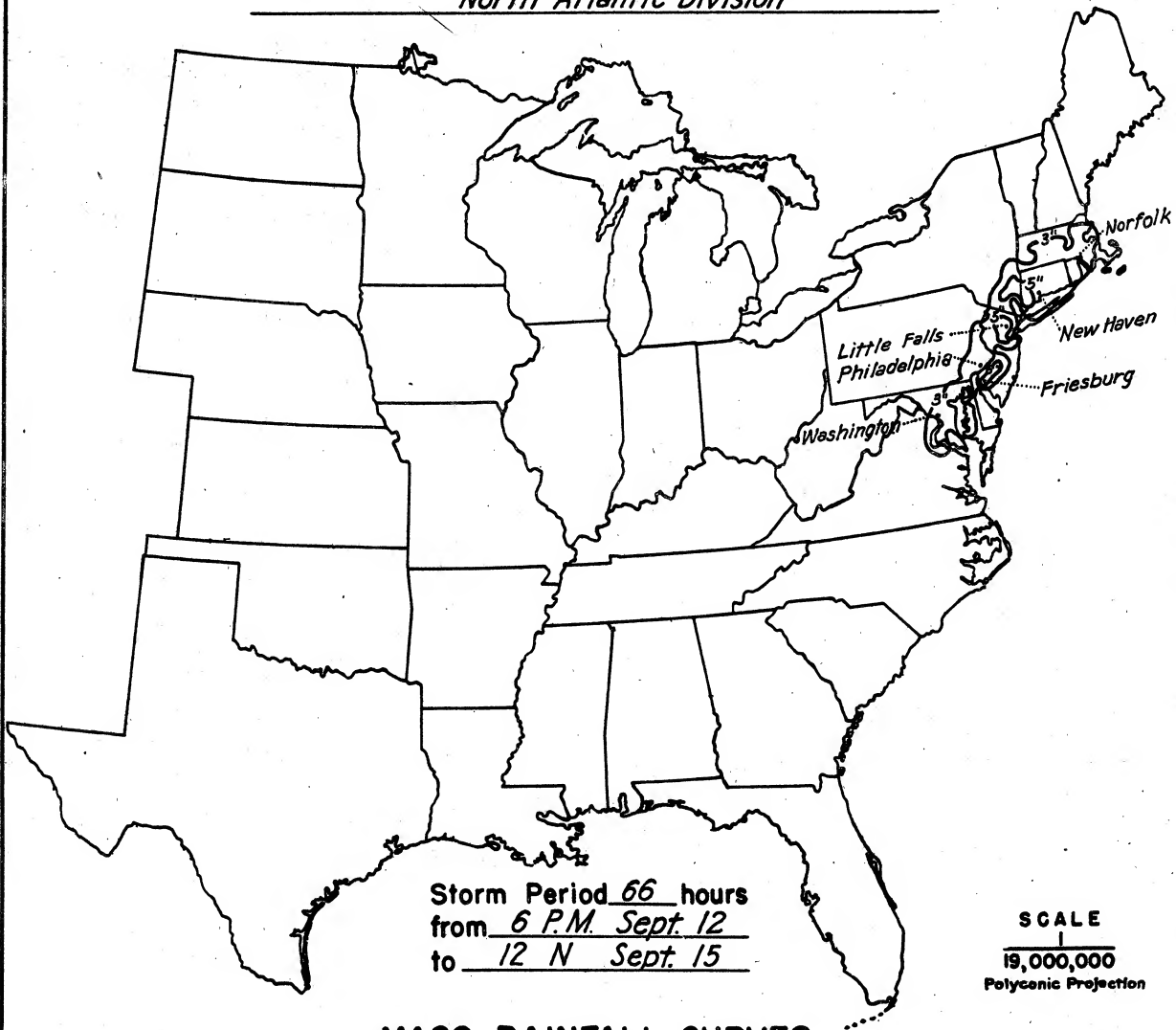
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

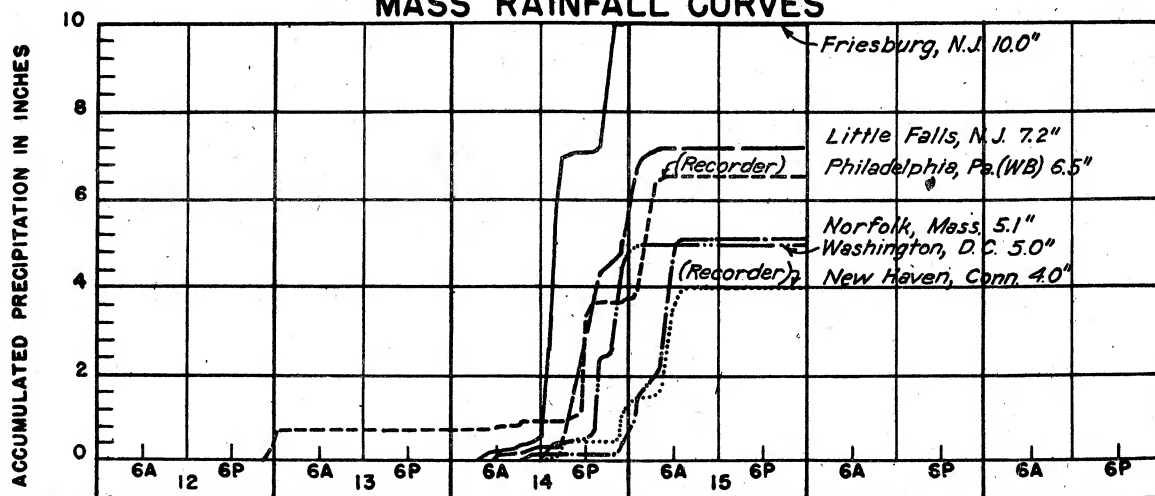
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48	60	66			
Max. Station	6.6	9.4	9.8	10.0	10.0	10.0	10.0	10.0	10.0			
10	6.3	9.2	9.7	9.8	9.8	9.8	9.8	9.8	9.8			
100	5.3	8.2	8.5	8.7	8.7	8.7	8.7	8.8	8.8			
200	4.4	7.3	8.0	8.2	8.2	8.2	8.3	8.4	8.4			
500	3.1	5.8	7.2	7.4	7.4	7.4	7.6	7.8	7.8			
1,000	2.5	4.9	6.5	6.7	6.7	6.7	6.8	7.1	7.1			
2,000	2.2	4.3	5.9	6.1	6.1	6.1	6.2	6.4	6.4			
5,000	2.0	3.7	5.2	5.4	5.4	5.4	5.4	5.5	5.5			
10,000	1.9	3.3	4.7	4.9	4.9	4.9	4.9	5.0	5.0			
20,000	1.7	3.0	4.2	4.5	4.5	4.5	4.5	4.6	4.6			
35,000	1.6	2.7	3.9	4.2	4.2	4.2	4.2	4.3	4.3			

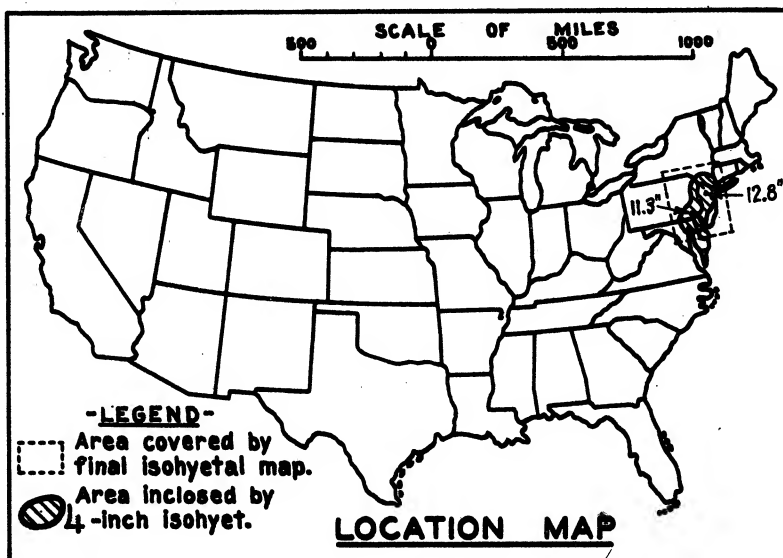
STORM STUDIES - ISOHYETAL MAP

Storm of September 12-15, 1904 Assignment NA 1-9
Study Prepared by: Philadelphia, Penna. District
North Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 18 - 23, 1919

Assignment NA 1 - 11

Location Pa. - N.J. - Del.

Study Prepared by:

North Atlantic Division

Philadelphia District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 4/8/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4/28/45

Remarks: Centers at

Boonton, New Jersey and

Kennett Square, Pa.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	12
Form 5001-B (24-hour " ")-----	164
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	39

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

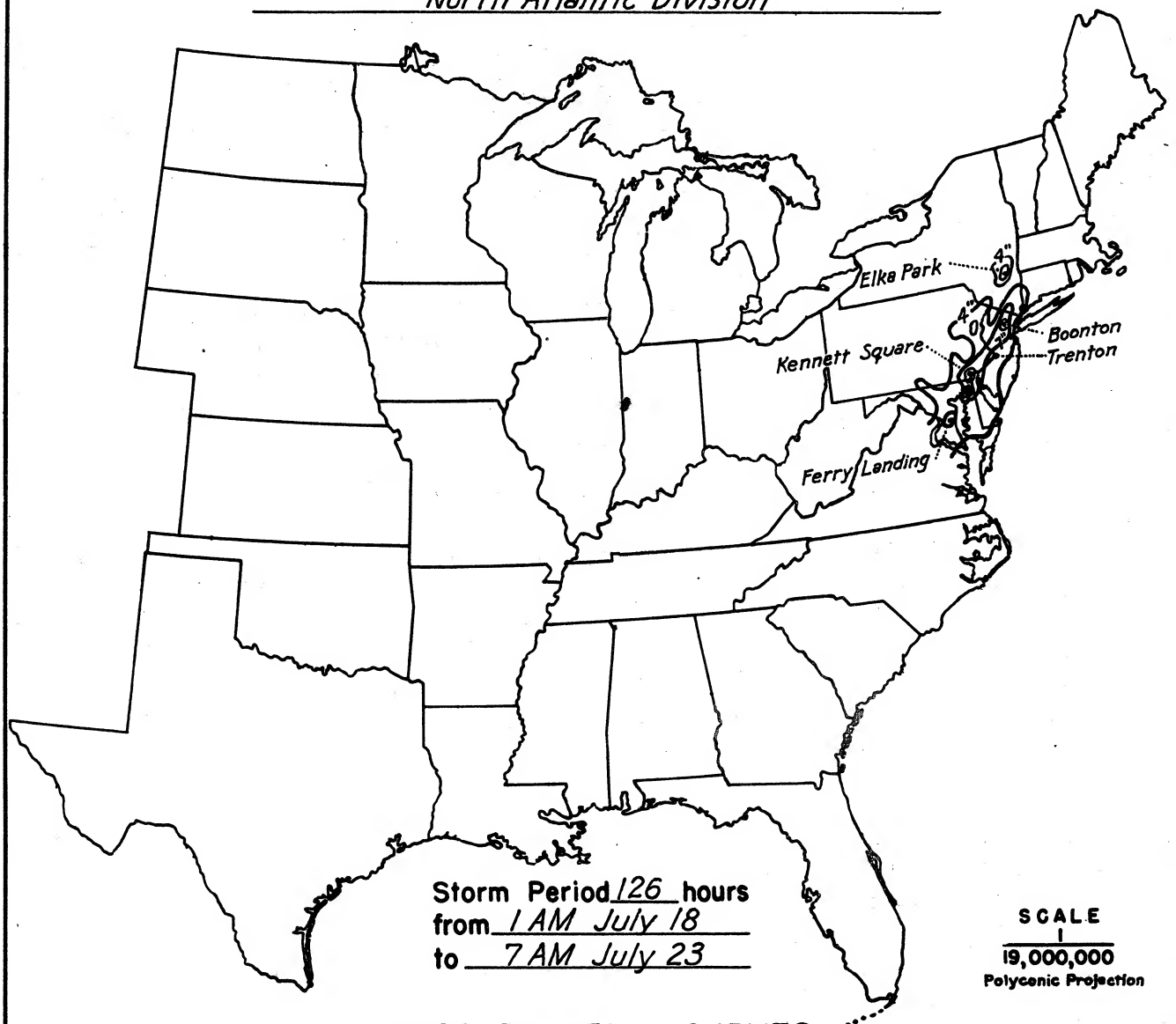
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

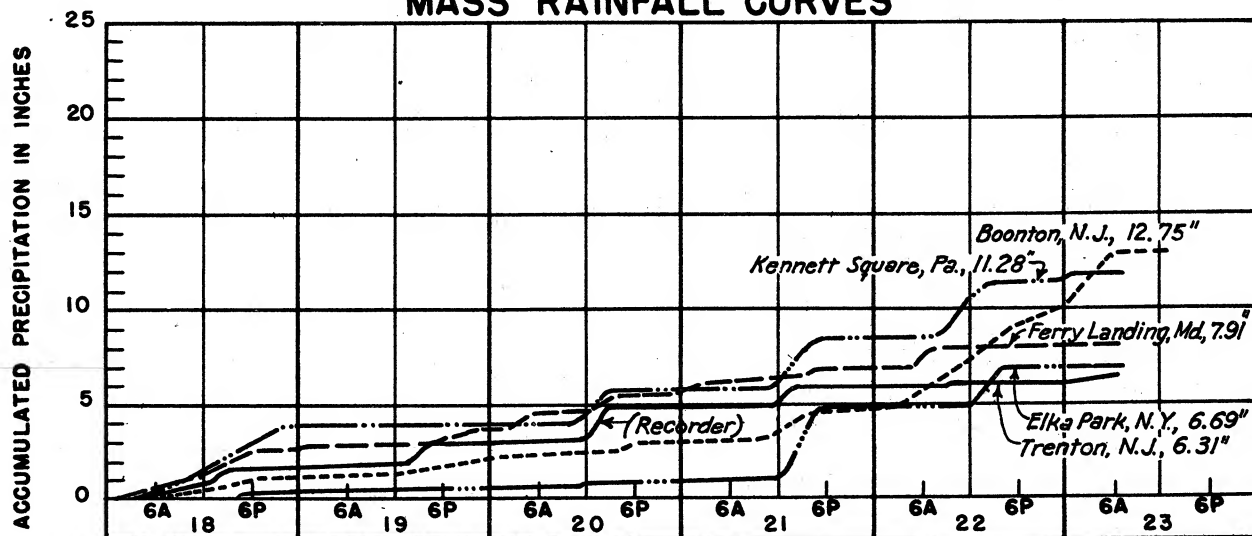
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	3.4	4.6	5.8	7.8	8.6	8.7	10.2	10.2	10.8	11.8	12.8
100	2.7	3.5	4.9	7.0	7.8	7.9	8.9	9.0	9.6	10.6	11.9
200	2.5	3.2	4.4	6.3	7.1	7.2	8.2	8.4	9.0	10.1	11.5
500	2.2	2.8	3.5	5.1	5.8	6.0	7.0	7.2	8.2	9.1	10.9
1,000	2.0	2.4	3.0	4.2	4.7	5.2	6.2	6.4	7.5	8.3	10.3
2,000	1.6	2.1	2.5	3.4	3.8	4.4	5.4	5.6	6.7	7.5	9.6
5,000	1.2	1.7	1.9	2.6	2.9	3.3	4.3	4.5	5.5	6.4	8.2
10,000	0.8	1.3	1.5	2.0	2.2	2.5	3.4	3.8	4.6	5.6	7.2
20,000	0.6	1.0	1.2	1.6	1.8	2.1	2.7	3.1	3.8	4.7	6.0
34,500	0.4	0.9	1.0	1.3	1.5	1.8	2.3	2.7	3.2	4.0	5.1

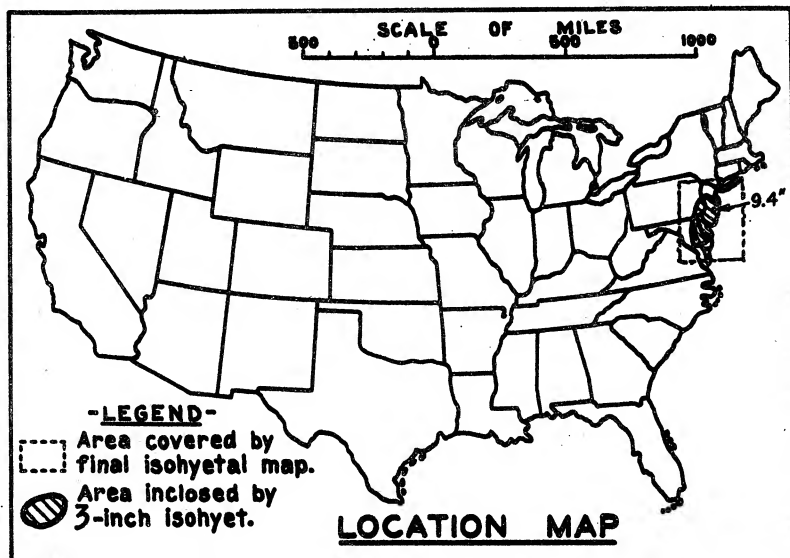
STORM STUDIES - ISOHYETAL MAP

Storm of July 18-23, 1919 Assignment NA 1-11
Study Prepared by: Philadelphia, Penna. District
North Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 13 - 14, 1919
 Assignment NA 1 - 12
 Location N.J. Del. Md.
 Study Prepared by:

North Atlantic Division
 Philadelphia District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/7/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/27/45

Remarks: Centers at
 Northfield, N.J. and
 Tuckerton, N.J.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	5
Form 5001-B (24-hour " " " ").....	30
Form 5001-D (" " " " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	9

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

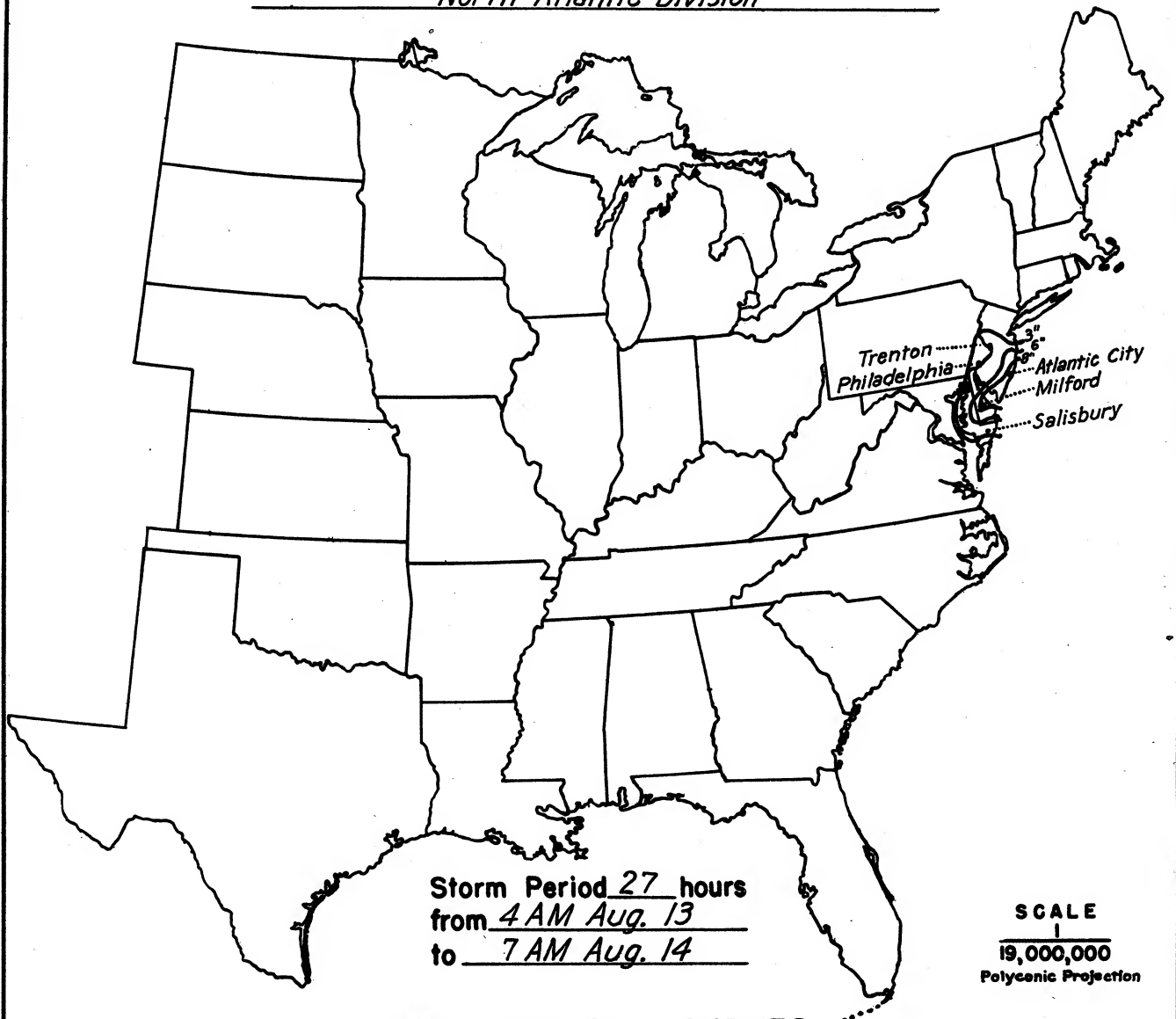
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	2
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

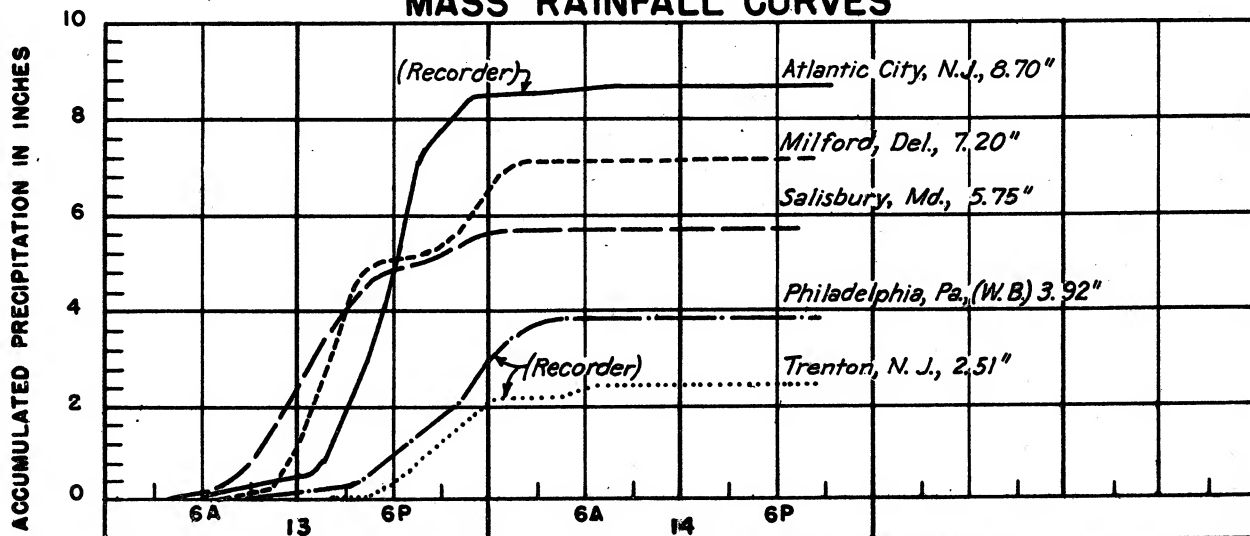
Area in Sq. Mi.	Duration of Rainfall in Hours											
	3	6	9	12	18	24	27					
10	4.5	6.9	8.3	8.8	9.0	9.4	9.4					
100	3.9	6.2	7.6	8.4	8.8	9.3	9.3					
200	3.5	5.8	7.3	8.2	8.7	9.2	9.2					
500	3.0	5.2	6.8	7.8	8.5	9.0	9.0					
1,000	2.6	4.7	6.3	7.4	8.2	8.8	8.8					
2,000	2.3	4.2	5.7	6.8	7.8	8.2	8.2					
5,000	1.8	3.4	4.5	5.4	6.5	6.8	6.9					
10,000	1.4	2.3	3.3	4.0	5.1	5.5	5.6					

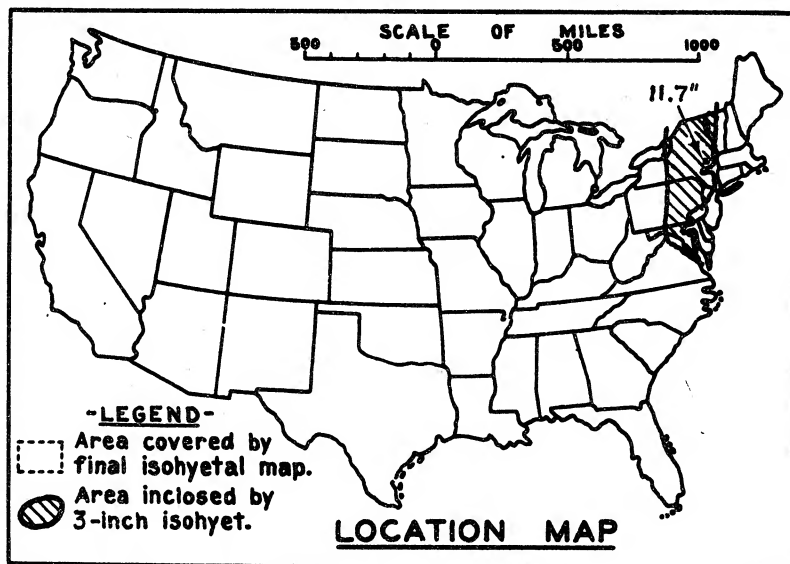
STORM STUDIES - ISOHYETAL MAP

Storm of August 13-14, 1919 Assignment NA 1-12
Study Prepared by: Philadelphia, Penna. District
North Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 4-6, 1932
 Assignment N A 1 - 21
 Location Penna.; N. J., N. Y.
 Study Prepared by:

North Atlantic Division
 Philadelphia District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/18/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/16/45

Remarks: Center at:

Elka Park, N. Y.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	15
Form 5001-B (24-hour " ")-----	217
Form 5001-D (" " " ")-----	—
Misc. precip. records, meteorological data, etc.-----	—
Form 5002 (Mass rainfall curves)-----	51

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

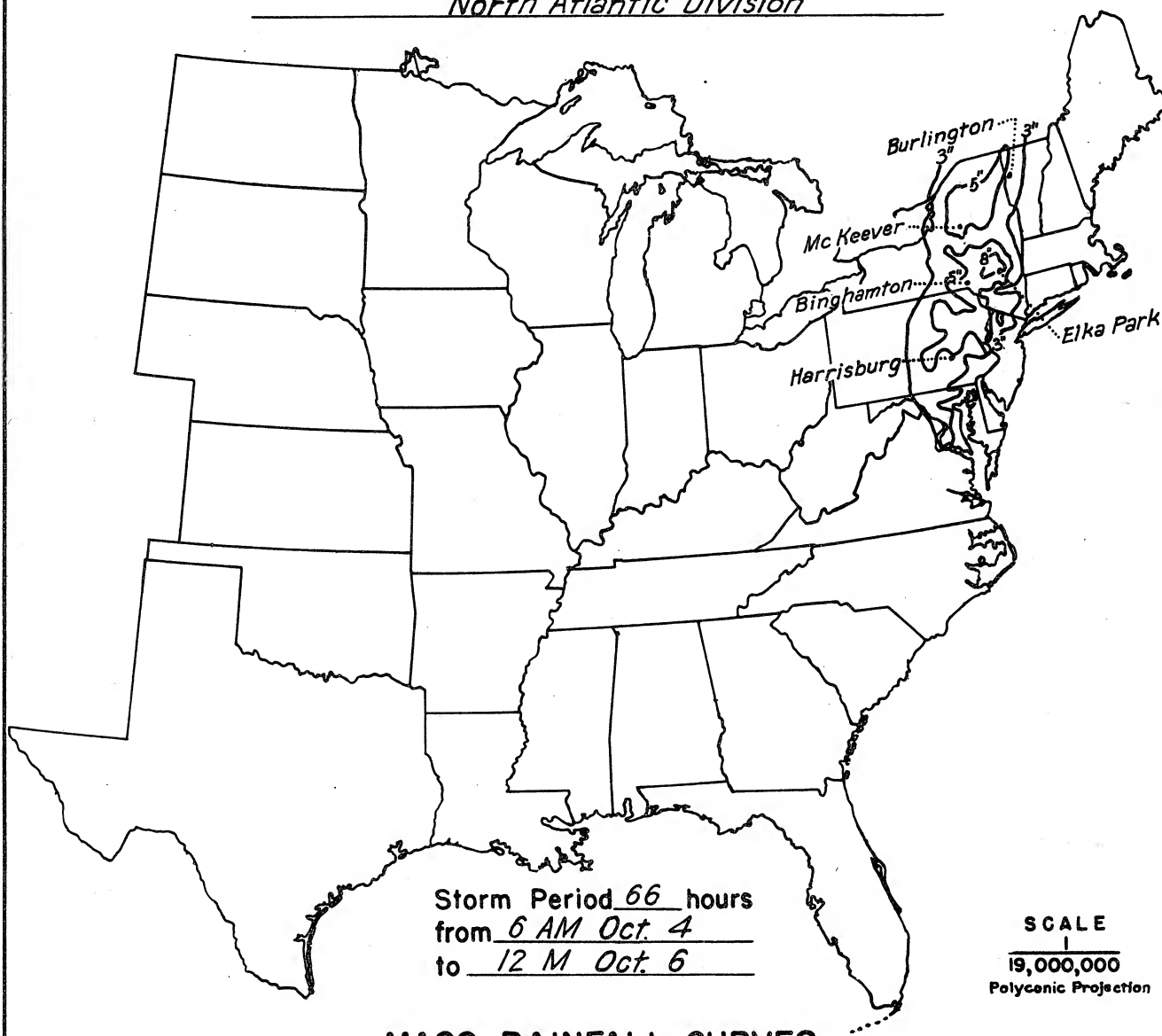
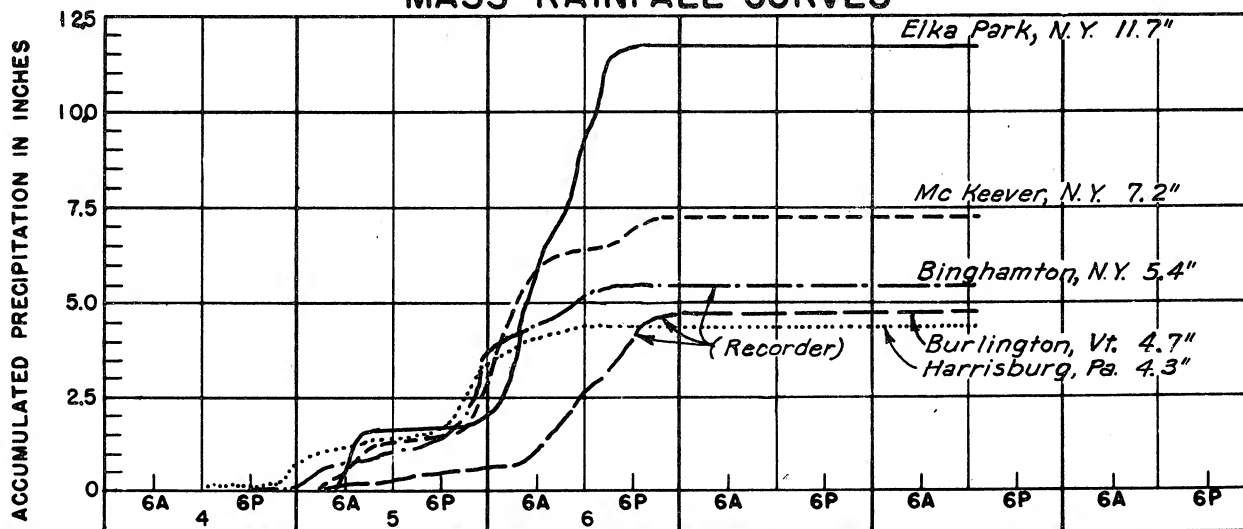
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

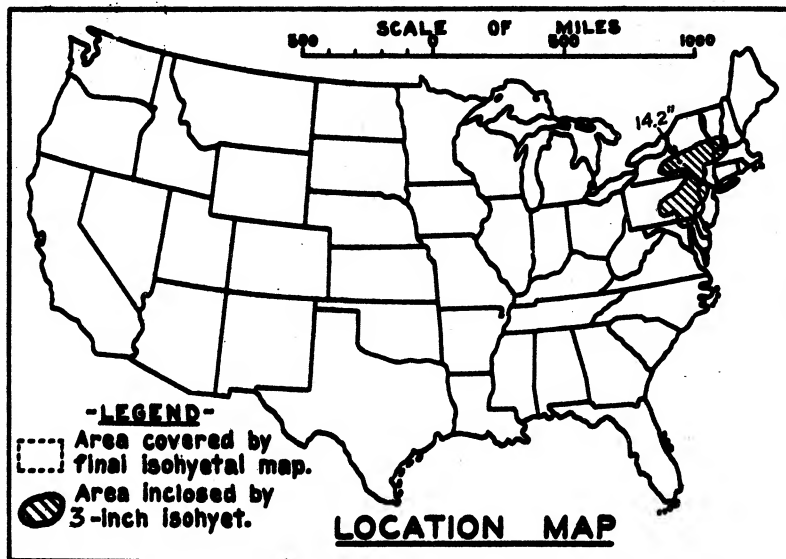
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	66			
Max. Station	4.7	7.5	10.0	10.0	10.0	11.5	11.7	11.7			
10	4.5	7.2	9.8	9.8	9.8	11.2	11.5	11.5			
100	3.9	6.3	8.9	9.1	9.1	10.1	10.6	10.6			
200	3.8	5.9	8.6	8.8	8.8	9.7	10.1	10.1			
500	3.6	5.5	7.8	8.1	8.1	8.8	9.1	9.1			
1,000	3.3	5.2	7.2	7.4	7.4	8.1	8.4	8.4			
2,000	3.1	4.8	6.6	6.8	6.8	7.4	7.7	7.7			
5,000	2.6	4.1	5.5	6.0	6.0	6.5	6.9	6.9			
10,000	2.2	3.5	4.8	5.4	5.4	5.9	6.3	6.3			
20,000	1.9	3.0	4.1	4.8	4.9	5.3	5.7	5.7			
50,000	1.5	2.4	3.3	4.1	4.2	4.6	5.0	5.0			
60,000	1.4	2.3	3.1	3.9	4.1	4.4	4.8	4.8			

STORM STUDIES - ISOHYETAL MAP

Storm of October 4-6, 1932 Assignment NA 1-21
Study Prepared by: Philadelphia, Penna. District
North Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 6 - 10, 1935
 Assignment N A 1 - 27
 Location N. Y. and Pa.
 Study Prepared by:

North Atlantic Division
 Syracuse District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/19/39
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 6/4/45

Remarks: Centers at;
 Hector, N. Y. and
 Pottsville, Pa.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- -
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 61

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

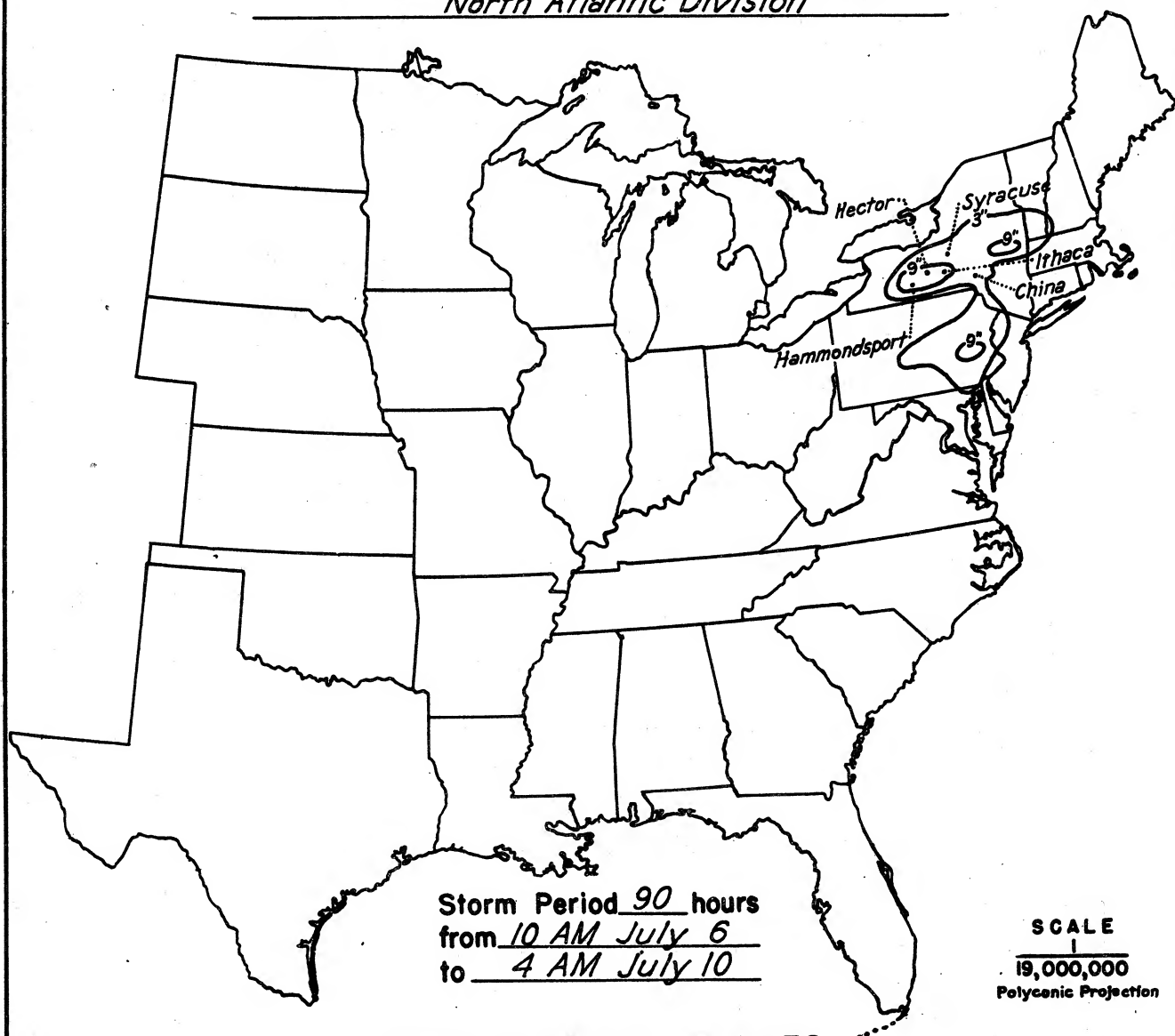
Form S-10 (Data from mass rainfall curves)----- 8
 Form S-11 (Depth-area data from isohyetal map)----- 3
 Form S-12 (Maximum depth-duration data)----- 9
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

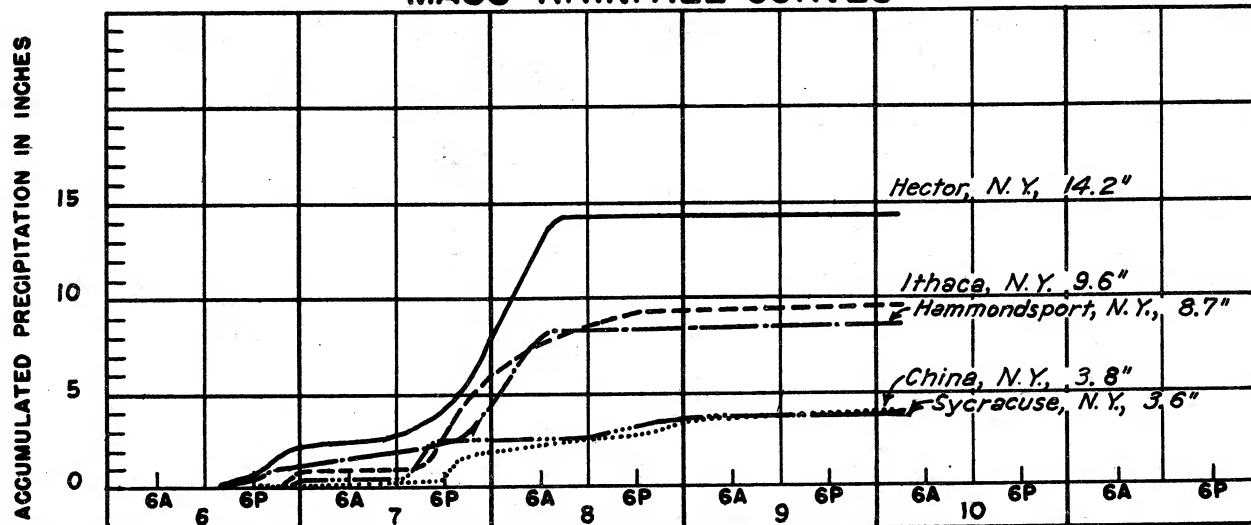
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	90
10	5.2	10.2	11.4	11.8	12.0	13.4	14.2	14.2	14.2	14.2
20	5.1	9.7	11.1	11.5	11.6	12.9	13.9	13.9	14.0	14.1
100	4.9	8.6	10.1	10.5	10.7	11.5	13.0	13.1	13.4	13.6
200	4.7	8.0	9.6	10.0	10.3	10.9	12.5	12.6	12.9	13.2
500	4.3	7.3	8.8	9.3	9.5	9.8	11.6	11.8	12.0	12.4
1,000	4.0	6.7	8.2	8.6	8.8	9.0	10.6	10.8	11.1	11.5
2,000	3.5	6.0	7.3	7.8	8.0	8.2	9.5	9.8	10.0	10.4
5,000	2.7	4.8	5.9	6.4	6.6	6.8	7.7	8.2	8.5	8.7
10,000	2.1	3.7	4.6	5.1	5.4	5.7	6.4	7.0	7.2	7.5
20,000	1.3	2.6	3.2	3.7	4.1	4.5	5.1	5.6	5.9	6.2
30,000	0.9	1.9	2.4	2.9	3.4	3.8	4.3	4.8	5.2	5.5
38,500	0.7	1.4	1.9	2.4	2.9	3.3	3.8	4.3	4.8	5.1

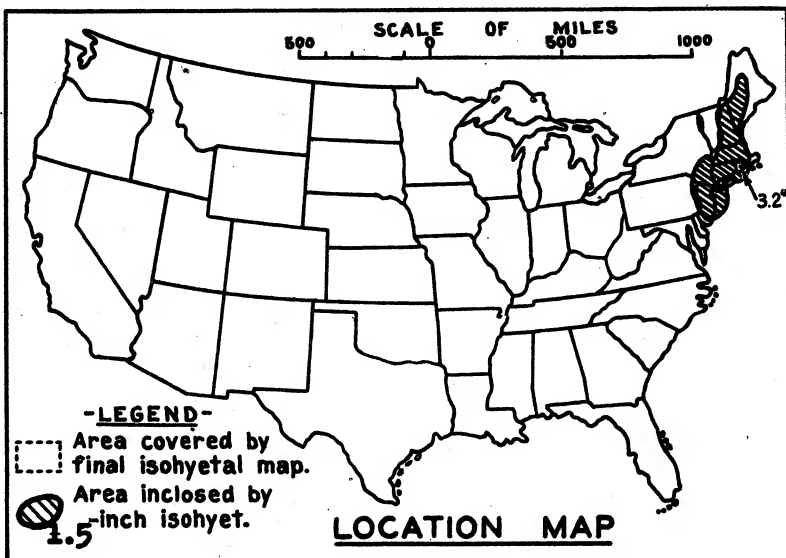
STORM STUDIES - ISOHYETAL MAP

Storm of July 6-10, 1935 Assignment NA 1-27
Study Prepared by: Syracuse, N. Y. District
North Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Dec. 19 - 21, 1936

Assignment - NA 1 - 30

Location New England

Study Prepared by:

North Atlantic Division

Providence District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 9/19/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/24/44Remarks: Centers near
Providence, R.I. and
Worcester, Mass.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 50
 Form 5001-B (24-hour " ")----- 85
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 13

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

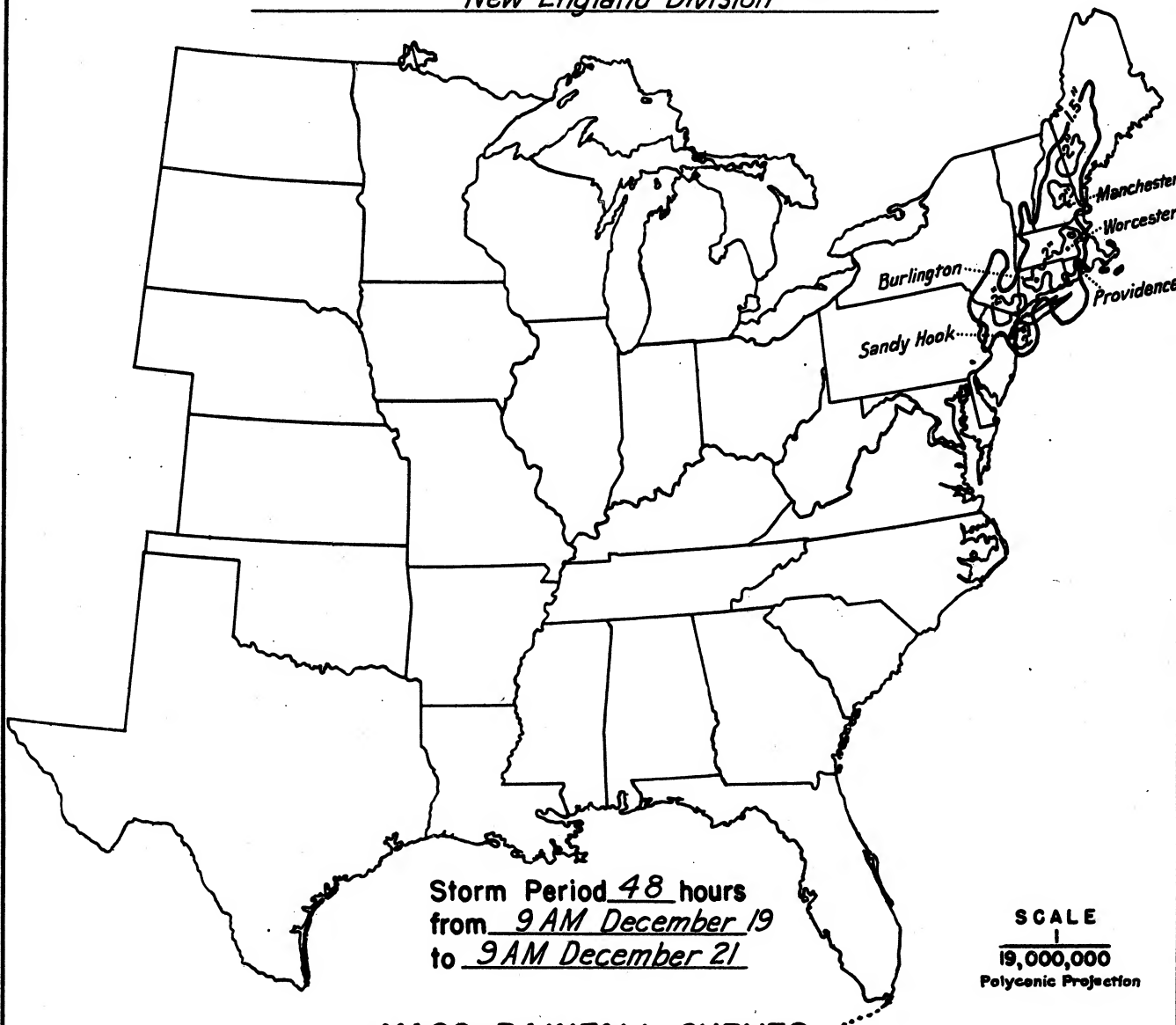
Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 2
 Form S-12 (Maximum depth-duration data)----- 8
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

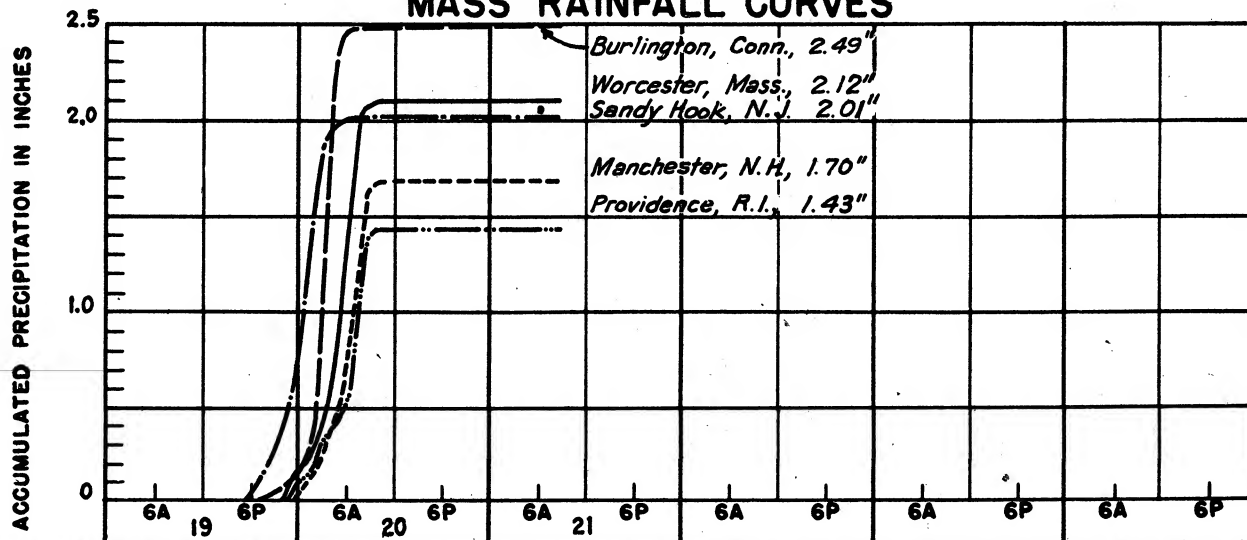
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	48					
10	2.5	3.2	3.2	3.2	3.2					
100	2.4	2.9	2.9	2.9	2.9					
200	2.3	2.8	2.8	2.8	2.8					
500	2.2	2.7	2.7	2.7	2.7					
1,000	2.1	2.5	2.6	2.6	2.6					
2,000	2.0	2.4	2.4	2.5	2.5					
5,000	1.8	2.2	2.3	2.3	2.3					
10,000	1.6	2.0	2.1	2.2	2.2					
20,000	1.3	1.8	2.0	2.0	2.0					
50,000	0.9	1.5	1.7	1.8	1.8					

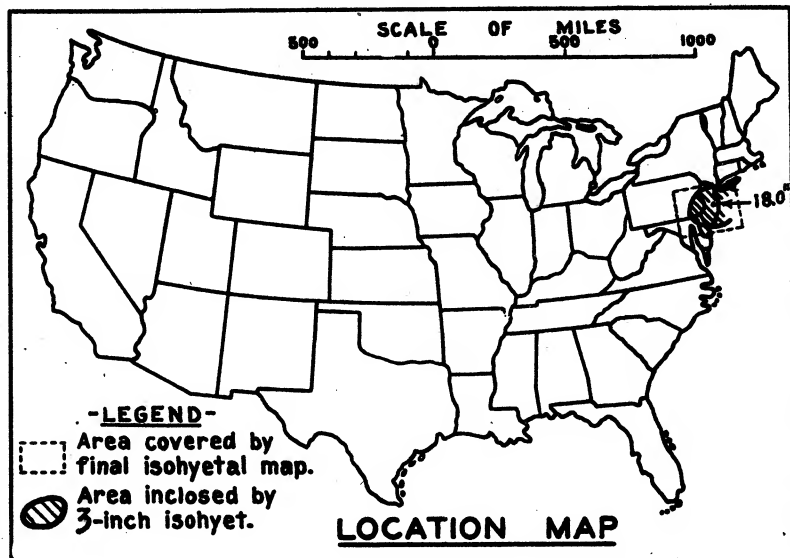
STORM STUDIES - ISOHYETAL MAP

Storm of December 19-21, 1936 Assignment NA 1-30
Study Prepared by: Providence, R.I. District
New England Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 19, 1939

Assignment NA 2 - 3

Location N.J. Pa. Del.

Study Prepared by:

North Atlantic Division

Philadelphia District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/7/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/24/44

Remarks: Centers at

Manahawkin & Tuckerton, N.J.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	30
Form 5001-B (24-hour " ")-----	28
Form 5001-D (" " " ")-----	1
Misc. precip. records, meteorological data, etc.-----	9
Form 5002 (Mass rainfall curves)-----	28

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

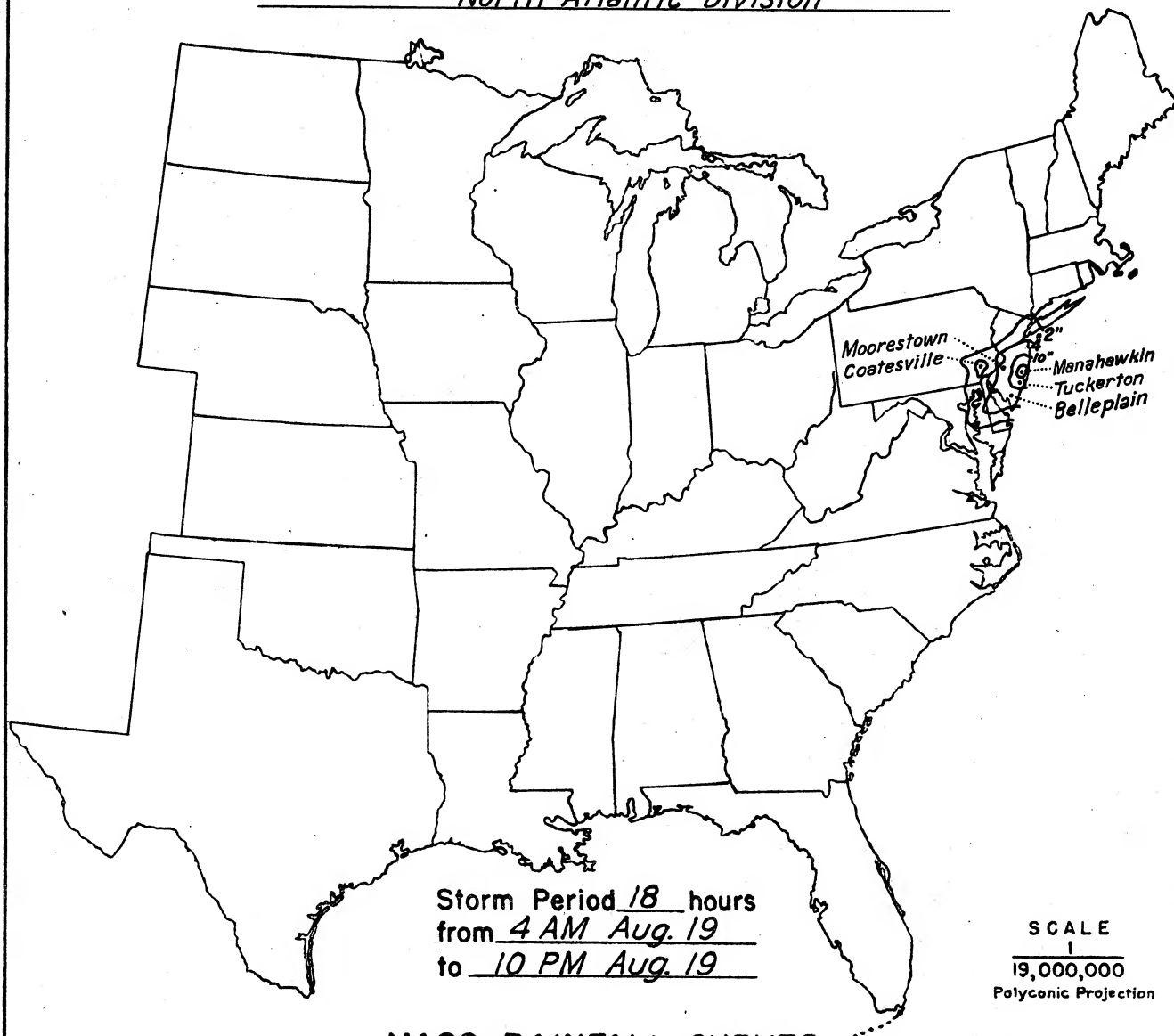
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

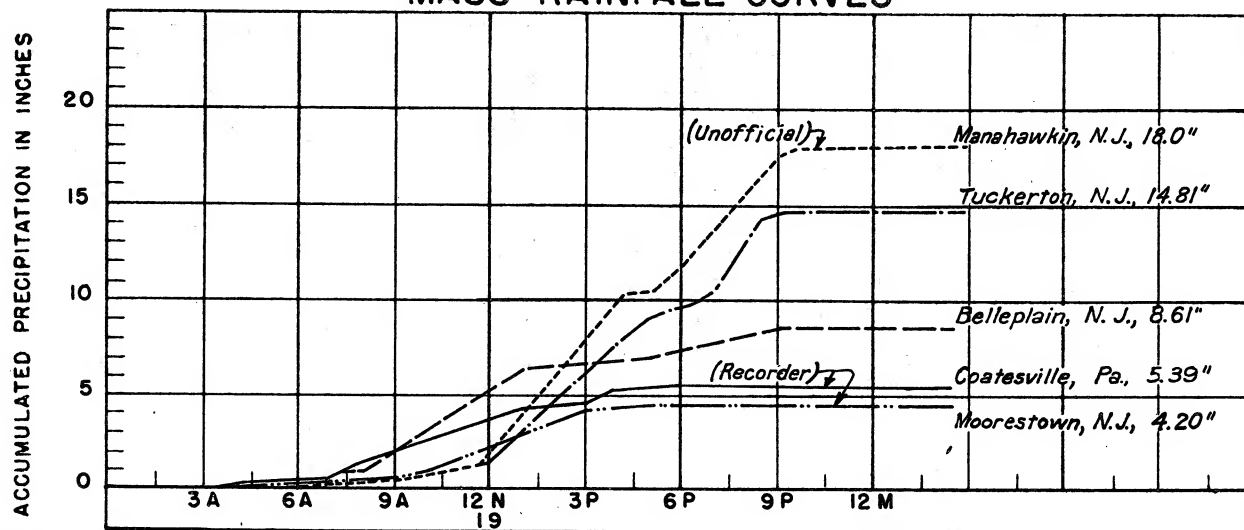
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

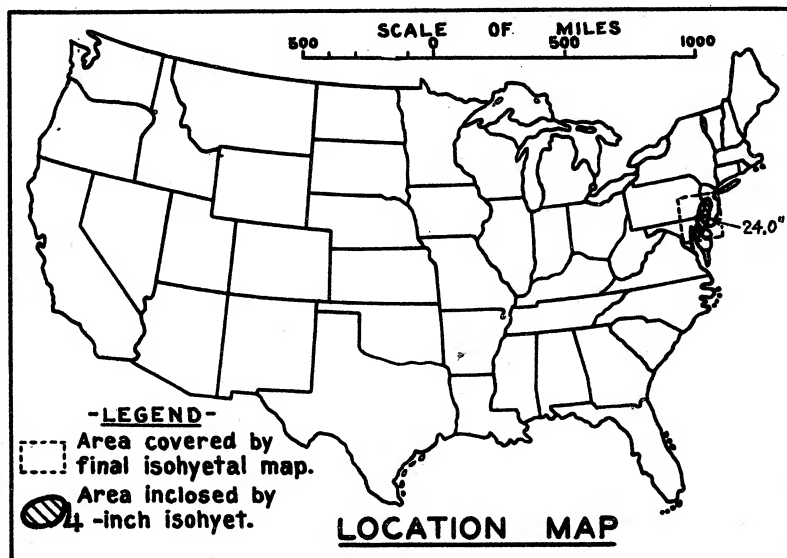
Area in Sq. Mi.	Duration of Rainfall in Hours										
	3	6	9	12	15	18					
10	6.4	9.7	14.3	17.1	17.6	17.8					
100	6.1	9.0	13.4	15.8	16.3	16.5					
200	5.8	8.6	12.8	15.1	15.6	15.7					
500	5.4	7.9	11.3	13.4	14.0	14.1					
1,000	4.7	7.0	9.4	11.3	12.0	12.2					
2,000	3.7	5.8	7.3	8.9	9.6	10.0					
5,000	2.2	4.0	5.2	6.2	6.7	7.1					
10,000	1.5	2.9	4.0	4.6	5.0	5.4					

STORM STUDIES - ISOHYETAL MAP

Storm of August 19, 1939 Assignment NA-2-3Study Prepared by: Philadelphia, Penna. District
North Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Aug. 31 - Sept. 1, 1940

Assignment NA 2 - 4

Location S.W. New Jersey

Study Prepared by:

North Atlantic Division

Philadelphia District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12/17/41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 8/15/44

Remarks: Centers at

Ewan, New Jersey and

Wenonah, New Jersey

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " " " ")-----	13
Form 5001-D (" " " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	15
Form 5002 (Mass rainfall curves)-----	3

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

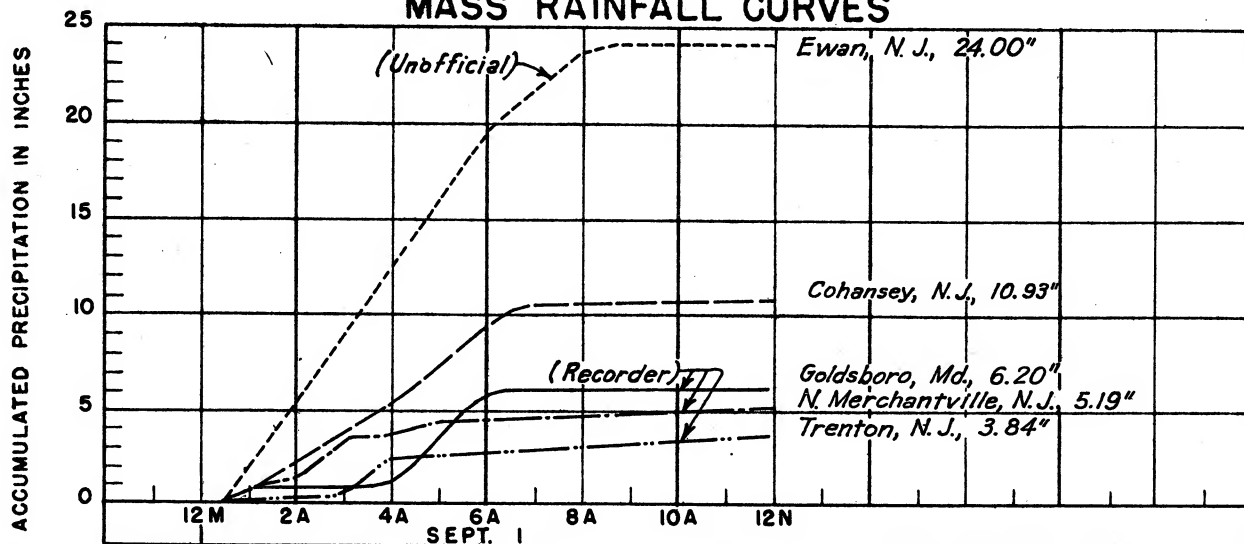
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

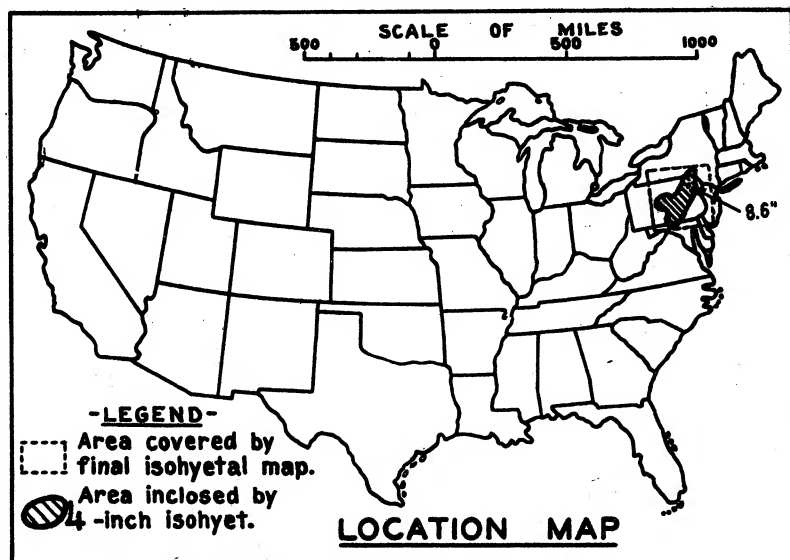
Area in Sq. Mi.	Duration of Rainfall in Hours										
	1	2	3	4	5	6	7	8	9	10	12
Max. Stations	5.0	8.8	11.3	14.4	18.4	21.0	23.0	23.9	24.0	24.0	24.0
10	3.8	7.4	10.7	13.8	17.0	19.1	20.7	22.1	22.5	22.7	22.7
50	3.3	6.4	9.2	12.1	15.0	17.1	18.8	19.9	20.3	20.4	20.4
100	2.9	5.8	8.3	11.1	13.8	15.6	17.2	18.3	18.7	18.8	18.8
200	2.6	5.2	7.4	9.7	12.1	13.7	15.1	16.0	16.4	16.5	16.6
500	2.1	4.2	6.0	7.7	9.4	10.8	11.8	12.5	12.8	13.0	13.2
1,000	1.8	3.5	5.0	6.2	7.4	8.5	9.3	9.8	10.1	10.3	10.5
2,000	1.4	2.6	3.7	4.7	5.4	6.1	6.7	7.1	7.4	7.5	7.8

STORM STUDIES - ISOHYETAL MAP

Storm of August 31 - September 1, 1940 Assignment NA 2-4Study Prepared by: Philadelphia, Penna. District
North Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 19 - 23, 1942

Assignment NA 2 - 5

Location Pennsylvania

Study Prepared by:

North Atlantic Division

Philadelphia District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/31/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/21/45Remarks: Centers at
Carbondale, Pa.,
Mahanoy City, Pa.,
Kirkwood, Pa.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 116

Form 5001-B (24-hour " ")----- 34

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc. ~~Storm supplement~~ 1 folder

Form 5002 (Mass rainfall curves)----- 71

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 3

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 5

Maximum duration-depth-area curves----- 1

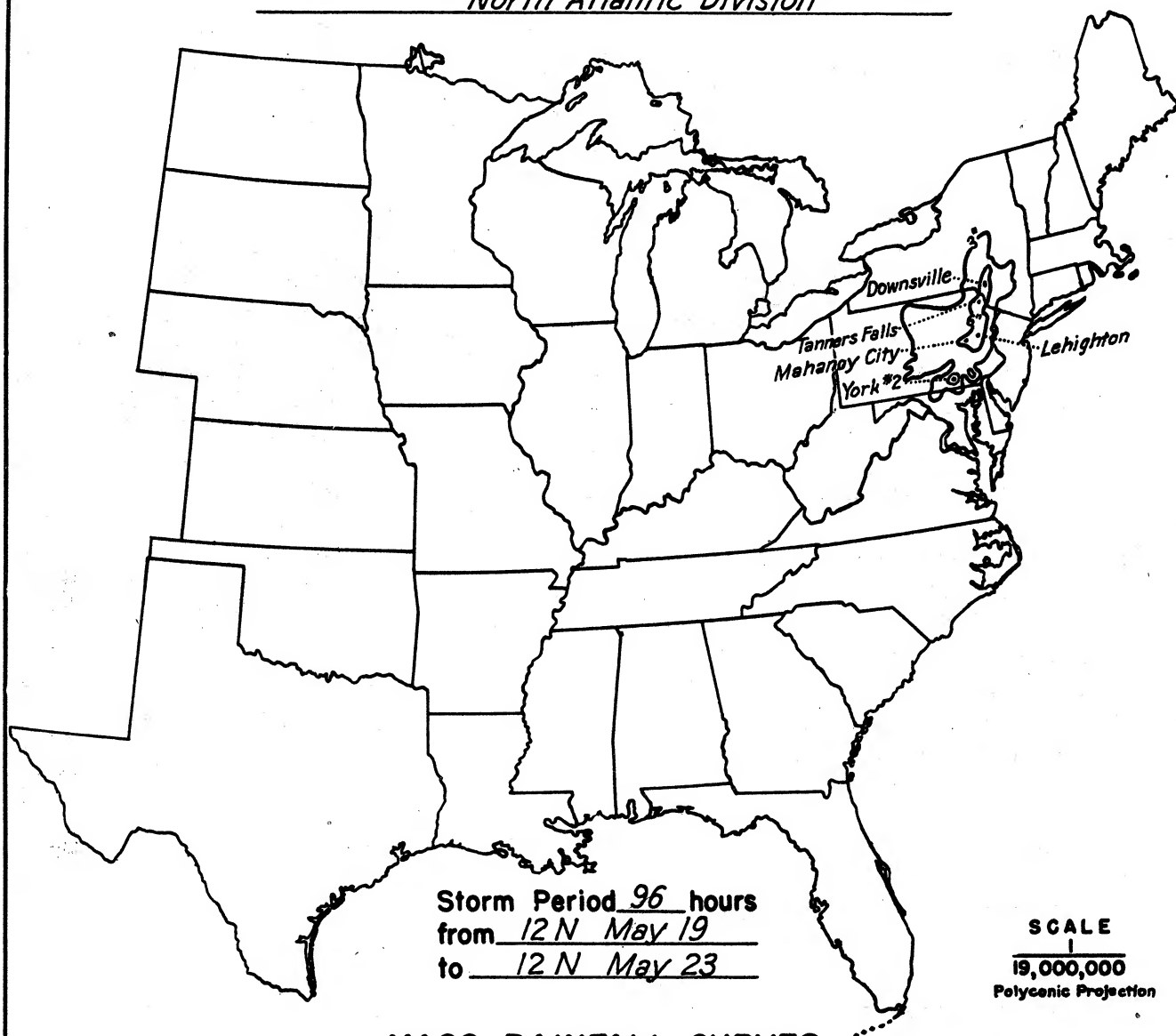
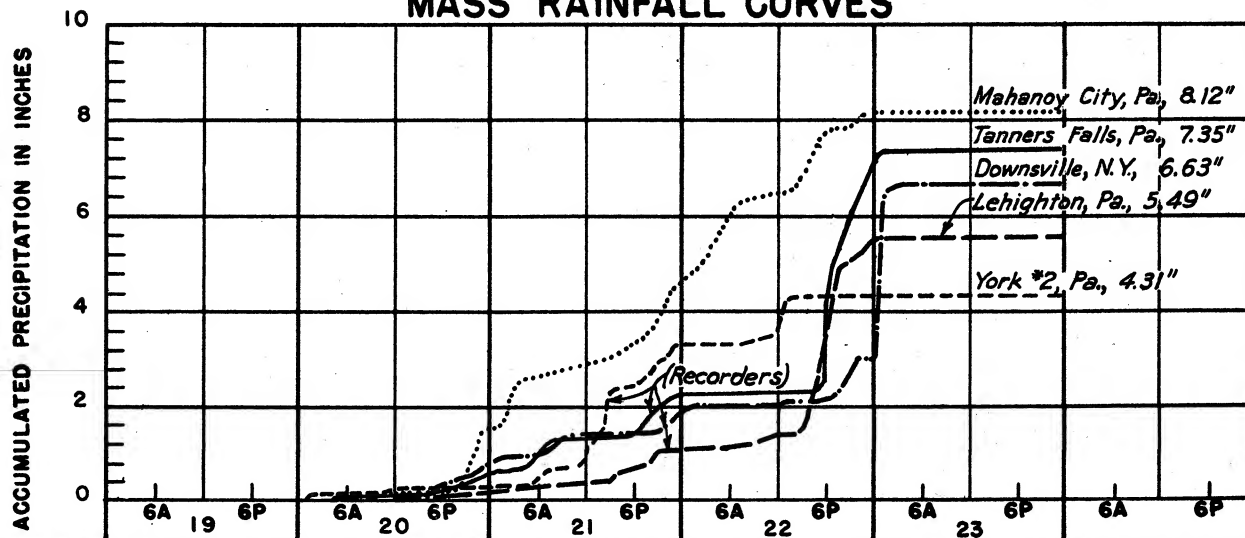
Data relating to periods of maximum rainfall----- 1

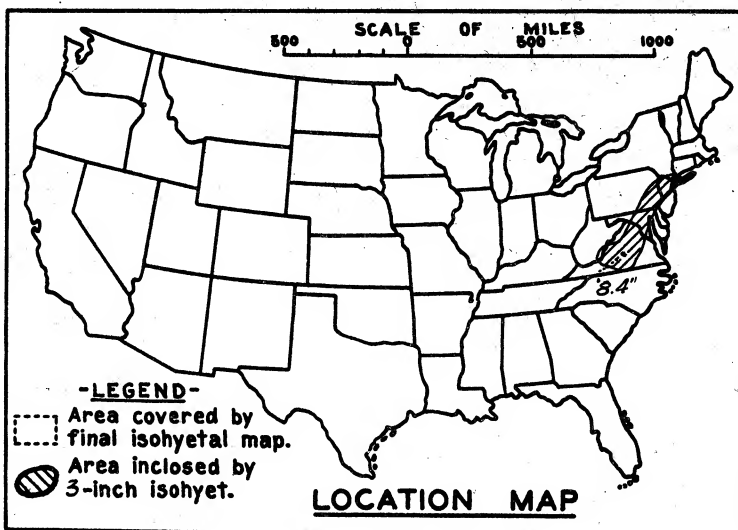
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	6.1	7.0	7.0	7.0	7.3	7.6	7.9	8.5	8.6	8.6
100	4.4	6.0	6.4	6.4	6.7	7.0	7.5	8.1	8.2	8.2
200	4.0	5.6	6.1	6.1	6.3	6.6	7.2	7.9	8.0	8.0
500	3.3	5.1	5.6	5.6	5.8	6.1	6.7	7.5	7.6	7.7
1,000	2.8	4.5	5.0	5.0	5.3	5.7	6.3	7.2	7.3	7.3
2,000	2.3	3.8	4.3	4.5	4.8	5.2	5.8	6.6	6.9	6.9
5,000	1.6	3.0	3.4	3.6	4.0	4.5	5.1	6.0	6.2	6.2
10,000	1.1	2.2	2.6	2.9	3.4	3.8	4.5	5.2	5.4	5.4
12,000	1.0	2.0	2.4	2.7	3.2	3.6	4.3	5.0	5.2	5.2

STORM STUDIES - ISOHYETAL MAP

Storm of May 19-23, 1942 Assignment NA 2-5
Study Prepared by: Philadelphia, Penna. District
North Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 7-10 August 1942
 Assignment N A 2 - 8
 Location Va., W. Va., Md., Pa., N. J.,
 Study Prepared by: N. Y.

North Atlantic Division
 Philadelphia District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2-16-45

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 12-10-45

Remarks: Center At:
 Charlottesville, Va:

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:1,000,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	85
Form 5001-B (24-hour " ")-----	36
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	1 Folder
Form 5002 (Mass rainfall curves)-----	52

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

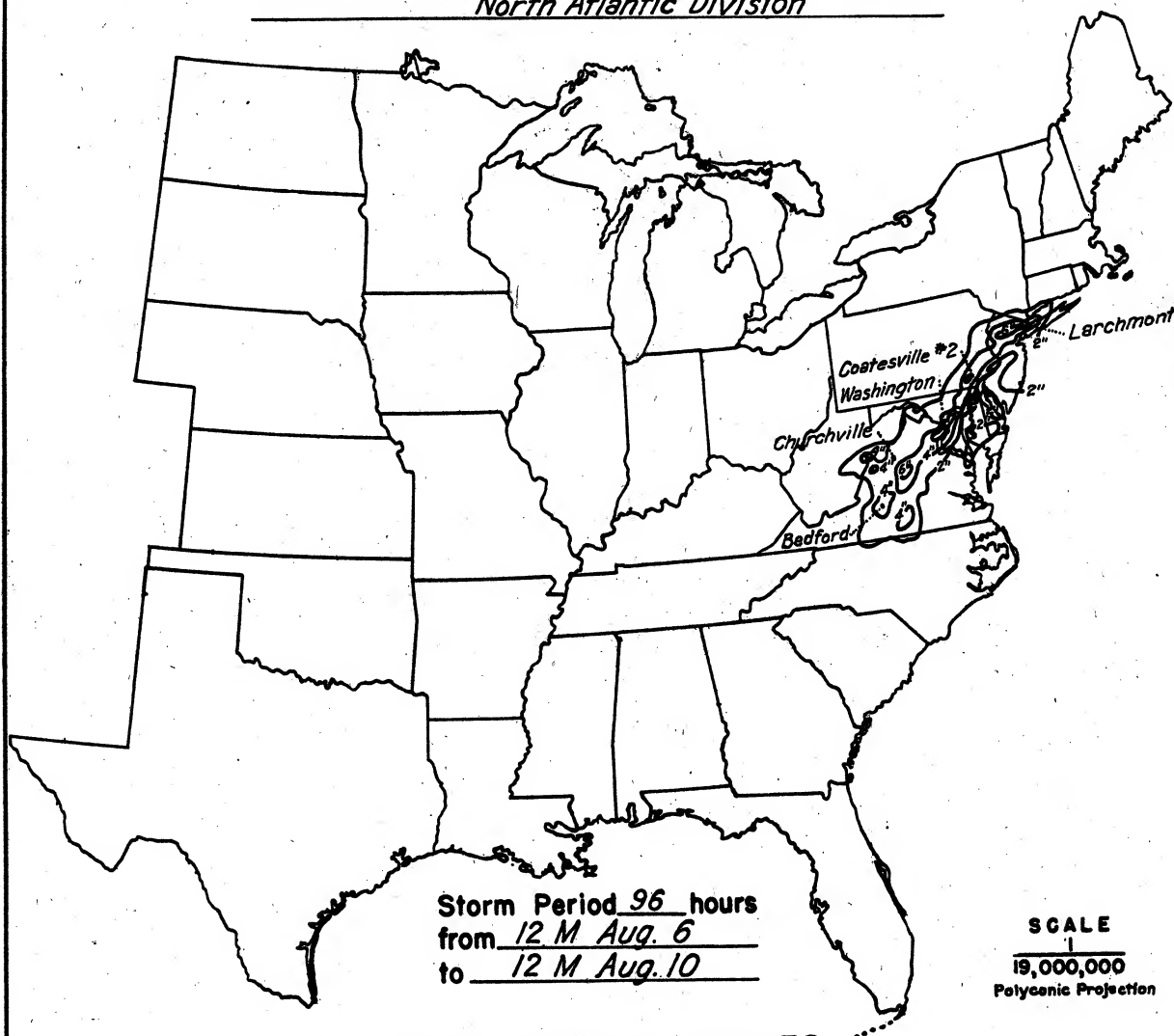
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

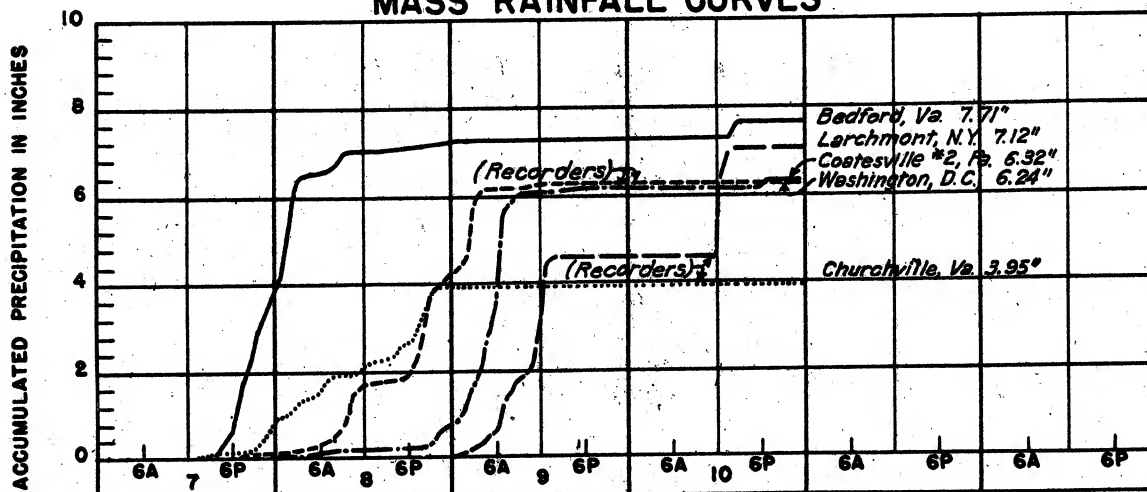
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	
Max. Station	4.9	6.5	7.1	7.1	7.2	7.2	7.9	8.4	8.4	8.4	
10	4.7	6.3	6.9	7.1	7.2	7.2	7.7	8.4	8.4	8.4	
100	3.8	5.5	6.1	6.6	6.7	6.7	7.0	7.7	7.7	7.7	
200	3.5	5.2	5.8	6.2	6.4	6.4	6.8	7.2	7.3	7.3	
500	3.0	4.7	5.4	5.7	6.0	6.0	6.3	6.6	6.8	6.8	
1,000	2.7	4.2	5.0	5.3	5.6	5.7	5.9	6.1	6.4	6.5	
2,000	2.4	3.8	4.6	4.8	5.1	5.2	5.4	5.6	6.0	6.1	
5,000	1.9	3.1	3.9	4.2	4.4	4.6	4.8	5.0	5.4	5.5	
10,000	1.6	2.6	3.4	3.6	3.8	4.1	4.3	4.5	4.9	5.0	
20,000	1.2	2.1	2.8	3.1	3.3	3.6	3.8	4.0	4.3	4.5	
24,500	1.1	2.0	2.6	2.8	3.1	3.5	3.7	3.8	4.0	4.2	

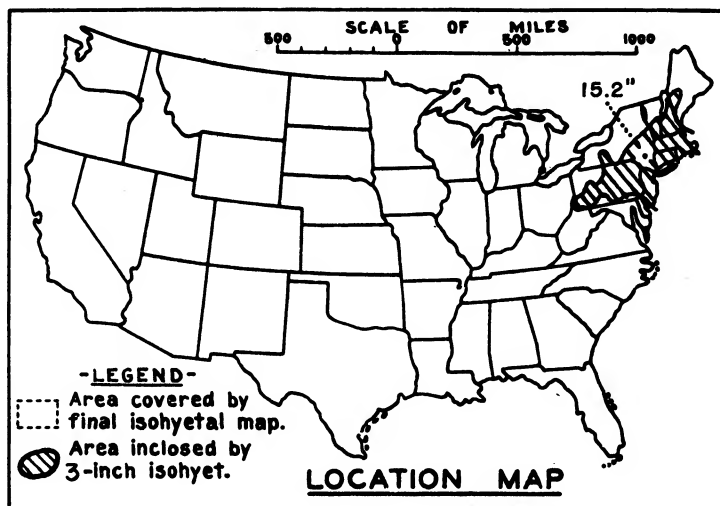
STORM STUDIES - ISOHYETAL MAP

Storm of August 7-10, 1942 Assignment NA 2-8
 Study Prepared by: Philadelphia, Penna. District
North Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 11-15 Aug. 1955

Assignment NA 2-21A

Location Maine to Maryland

Study Prepared by:

New England Division

Part I Reviewed by H. M. Sec. of
Weather Bureau, Dec. 1955Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/8/59Remarks: Center at Slide
Mt., N.Y., Dewpt. 73°, Ref.
Pt. 100 SE.

Grid D-4

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	276
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	91
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	857

PART II

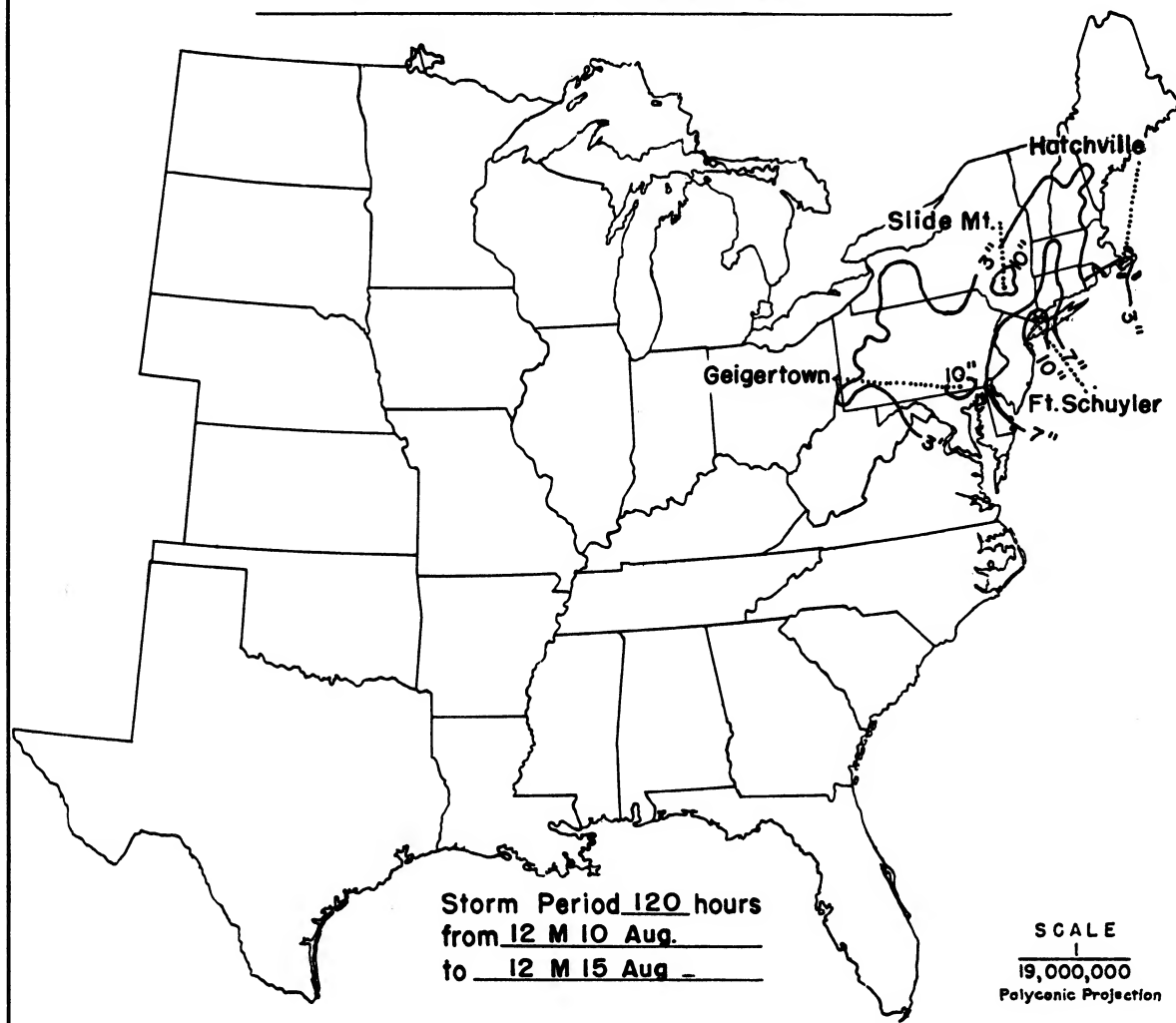
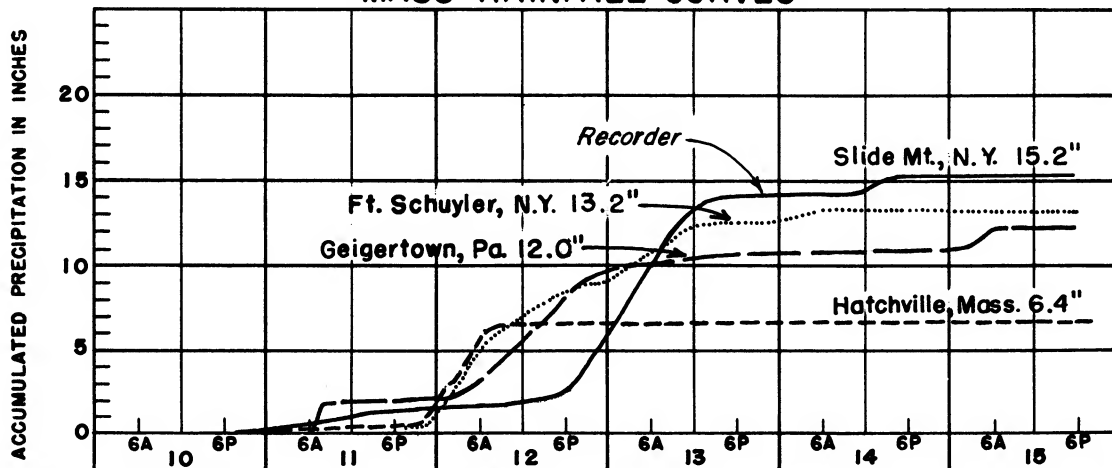
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

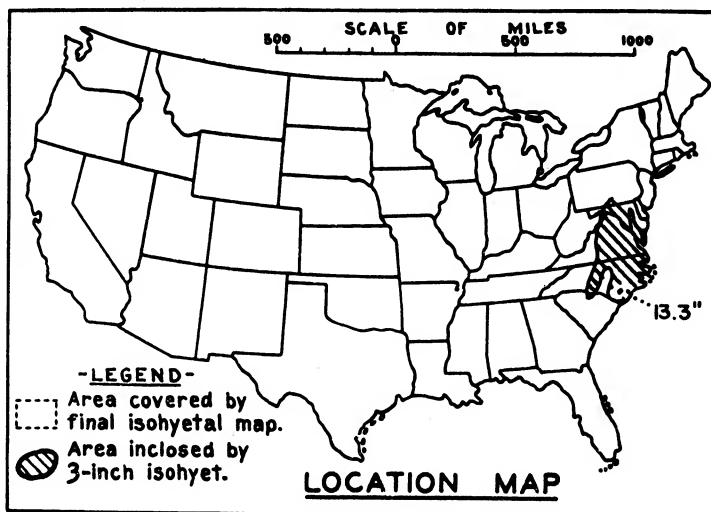
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	10
Form S-11 (Depth-area data from isohyetal map)-----	7
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
Max. Station	6.6	9.8	10.9	11.4	12.3	12.5	12.6	13.7	13.9	15.2	15.2
10	5.6	8.8	10.3	10.8	11.5	12.0	12.5	13.4	13.5	14.5	14.5
100	4.4	6.9	8.0	8.4	9.6	11.1	12.0	12.6	12.7	13.1	13.1
200	3.9	6.0	6.9	7.5	8.8	10.5	11.6	12.1	12.3	12.5	12.5
500	3.3	4.8	5.6	6.5	7.9	9.7	10.7	11.1	11.3	11.5	11.5
1,000	3.0	4.1	5.0	6.0	7.4	9.0	9.8	10.2	10.4	10.6	10.6
2,000	2.6	3.6	4.6	5.5	6.9	8.4	9.0	9.4	9.6	9.8	9.8
5,000	2.1	3.0	4.0	5.0	6.3	7.5	8.1	8.4	8.7	9.0	9.0
10,000	1.7	2.6	3.6	4.5	5.6	6.6	7.2	7.7	8.0	8.4	8.4
20,000	1.4	2.3	3.1	3.9	4.8	5.5	6.2	6.9	7.2	7.5	7.5
50,000	1.0	1.9	2.5	3.1	3.6	4.1	4.8	5.4	5.7	6.0	6.0
81,000	0.9	1.7	2.2	2.7	3.0	3.4	4.0	4.5	4.8	5.1	5.1

STORM STUDIES - ISOHYETAL MAPStorm of 11-15 August 1955Assignment NA 2-21AStudy Prepared by: New England Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 10-15 August 1955

Assignment NA 2-21B

Location S.C. to Pa.

Study Prepared by:

 North Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 9/28/56

Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 2/25/57

 Remarks: Center at New Bern,
 North Carolina
 Dewpoint 76° - Ref. Pt. 110
 Northeast

Grid H-6

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	107
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	34
Miscl. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	93

PART II

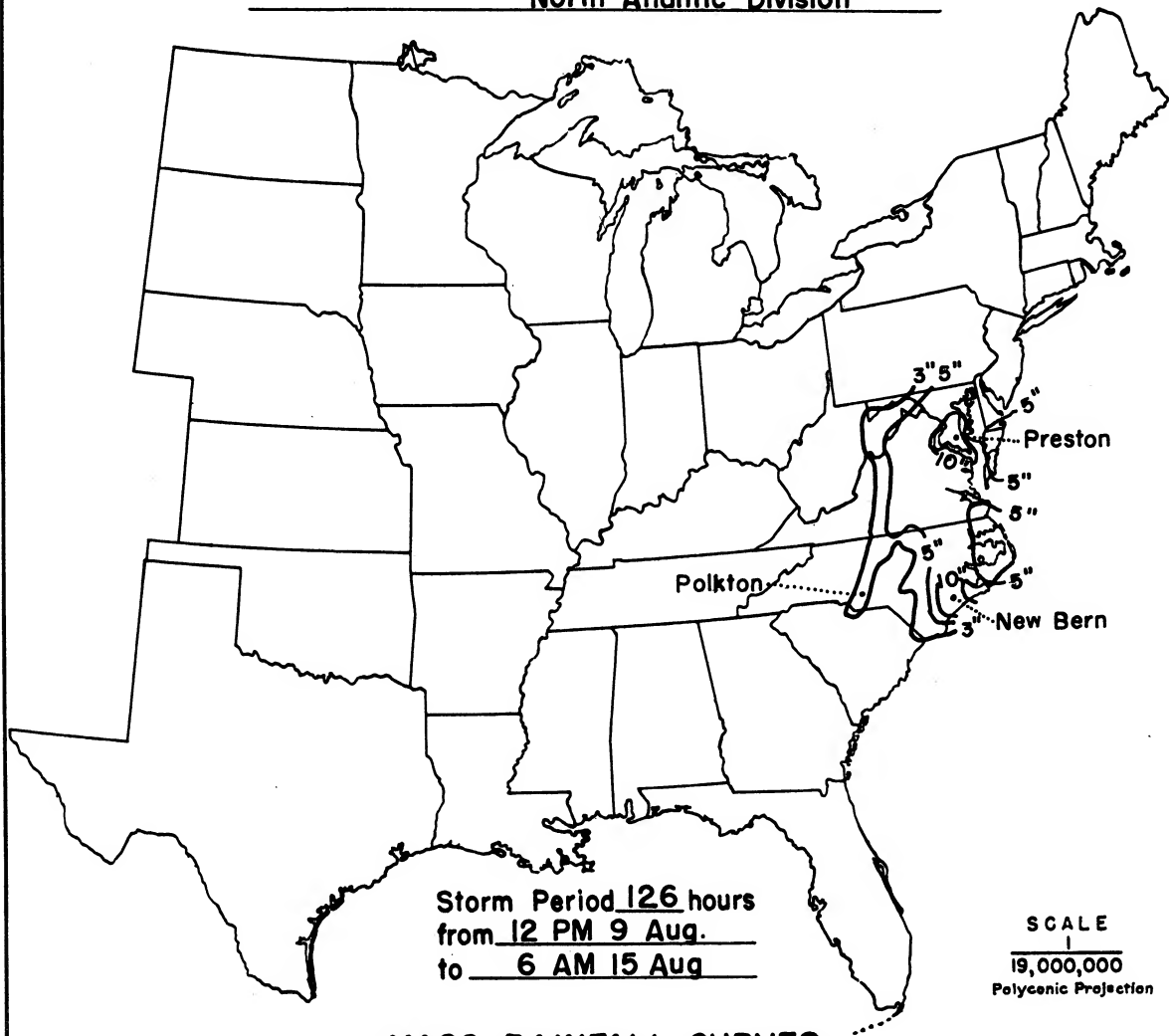
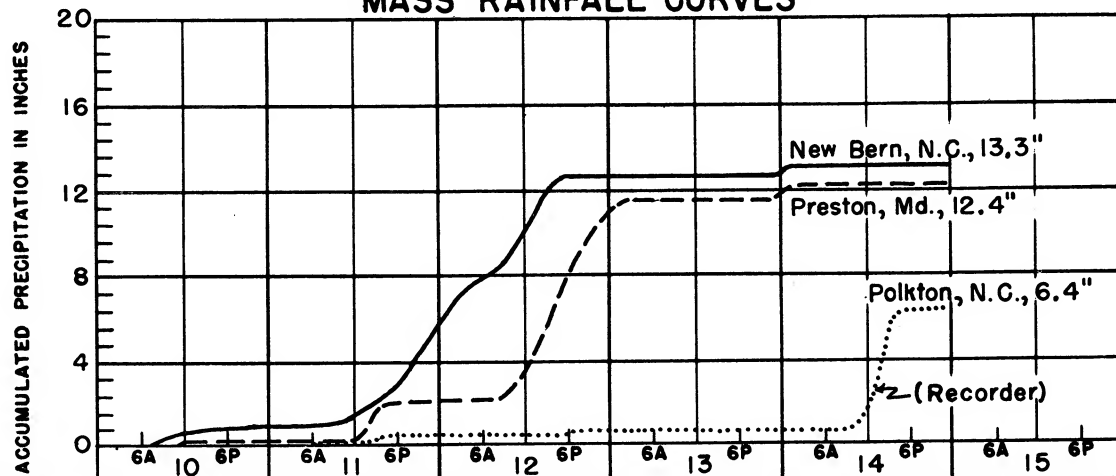
Final isohyetal maps, in 2 sheets, scale 1:1,000,000 and 1:250,000

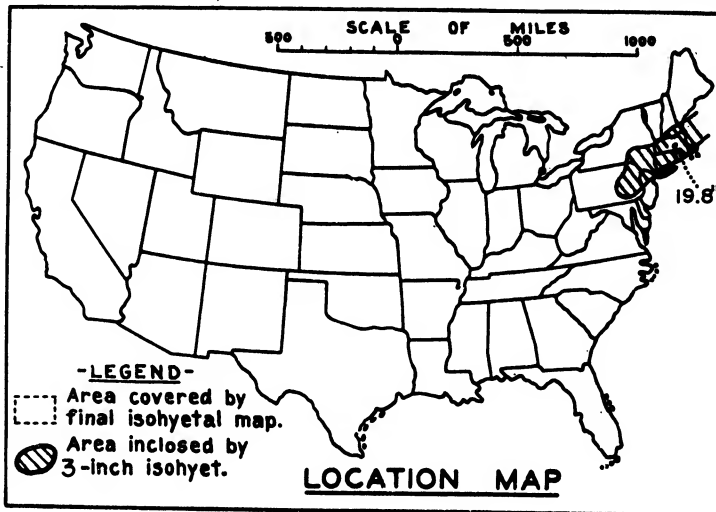
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	17
Form S-11 (Depth-area data from isohyetal map)-----	4
Form S-12 (Maximum depth-duration data)-----	17
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
Max. Station	5.7	8.3	9.6	10.2	11.3	11.8	12.0	12.6	12.7	13.3	13.3
10	5.1	7.7	9.1	9.9	11.0	11.7	12.0	12.6	12.7	13.3	13.3
100	4.5	7.0	8.6	9.6	10.7	11.4	11.9	12.6	12.7	13.2	13.2
200	4.2	6.7	8.4	9.4	10.6	11.3	11.8	12.5	12.6	13.1	13.1
500	3.8	6.2	8.2	9.2	10.4	11.1	11.6	12.4	12.5	13.0	13.0
1,000	3.6	5.9	7.9	8.9	10.2	10.8	11.3	12.0	12.1	12.6	12.6
2,000	3.3	5.6	7.5	8.5	9.7	10.4	10.9	11.3	11.4	11.8	11.8
5,000	3.0	5.3	6.8	7.8	8.5	9.0	9.3	9.8	9.9	10.1	10.1
10,000	2.7	4.9	6.3	7.2	7.8	8.0	8.2	8.7	8.8	9.1	9.1
20,000	2.3	4.5	5.7	6.5	6.9	7.0	7.3	7.7	7.8	8.0	8.1
50,000	1.7	3.3	4.3	5.0	5.4	5.7	6.2	6.4	6.5	6.9	7.0
69,000	1.4	2.7	3.6	4.3	4.7	5.0	5.5	5.6	5.7	6.2	6.3

STORM STUDIES - ISOHYETAL MAPStorm of 10-15 August 1955 Assignment NA 2-21BStudy Prepared by: Norfolk, Va., District
North Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 17-20 Aug. 1955
 Assignment NA 2-22A
 Location Mass. to Maryland
 Study Prepared by:
 New England Division

Part I Reviewed by H. M. Sec. of
 Weather Bureau, Dec. 1955
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 1/8/59
 Remarks: Center at Westfield,
 Mass., Dewpt 74°, Ref. Pt.
 105 S.

Grid D-3

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	280
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	91
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	689

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

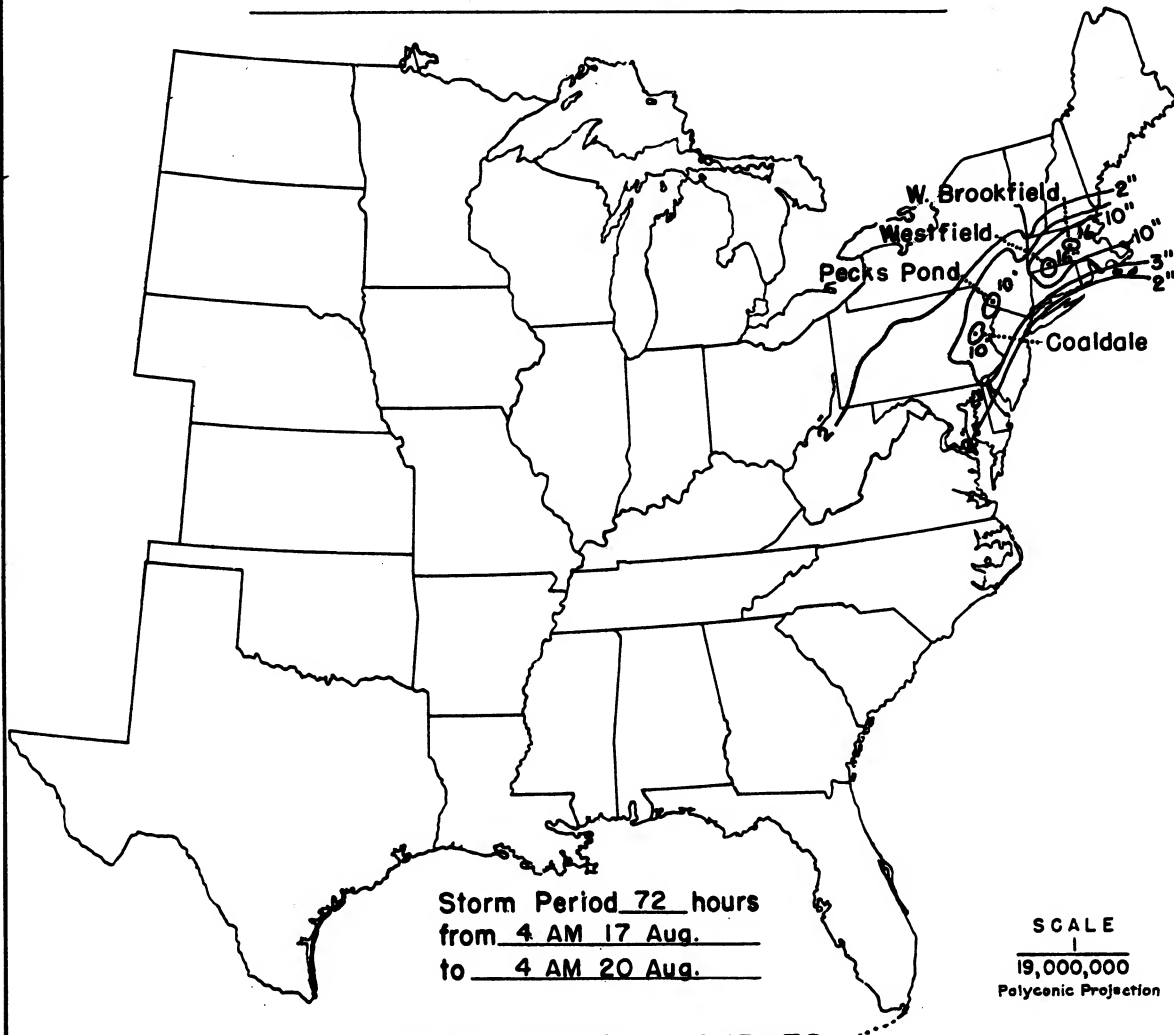
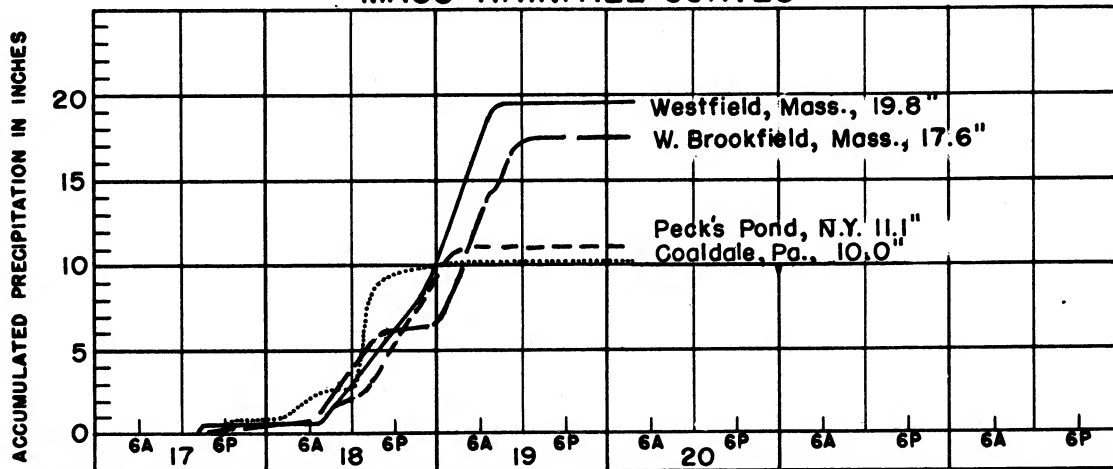
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	0

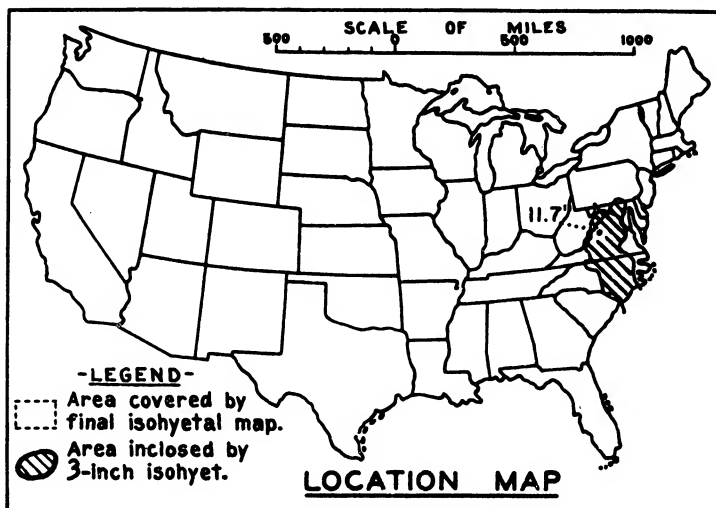
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
Max. Station	7.9	11.7	14.3	18.2	19.4	19.5	19.8	19.8	19.8	
10	7.8	11.1	13.0	16.4	18.5	18.9	19.4	19.6	19.6	
100	7.6	10.5	11.6	14.6	17.6	18.1	18.8	19.0	19.0	
200	7.4	10.2	11.4	14.2	17.1	17.6	18.2	18.4	18.4	
500	6.8	9.7	10.8	13.4	16.3	16.8	17.2	17.3	17.3	
1,000	6.2	9.2	10.2	12.4	15.4	15.9	16.2	16.4	16.4	
2,000	5.4	8.0	9.4	11.2	14.0	14.5	14.9	15.2	15.2	
5,000	4.0	6.3	7.9	9.5	11.7	12.1	12.6	13.0	13.0	
10,000	3.1	5.0	6.5	8.0	9.7	10.0	10.6	10.8	10.8	
20,000	2.1	3.6	4.9	6.3	7.6	7.9	8.3	8.5	8.5	
35,000	1.3	2.5	3.6	4.7	5.6	6.0	6.4	6.5	6.5	

STORM STUDIES - ISOHYETAL MAP

Storm of 17-20 August 1955 Assignment NA 2-22A
 Study Prepared by: New England Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 15-19 August 1955

Assignment NA 2-22B

Location S.C. to Pa.

Study Prepared by:

North Atlantic Division
Norfolk District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 9/20/56Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/25/57Remarks: Center at Big
Meadows, VirginiaDewpoint 74.7° 165 southeast
Grid F-6**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	93
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	30
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	88

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

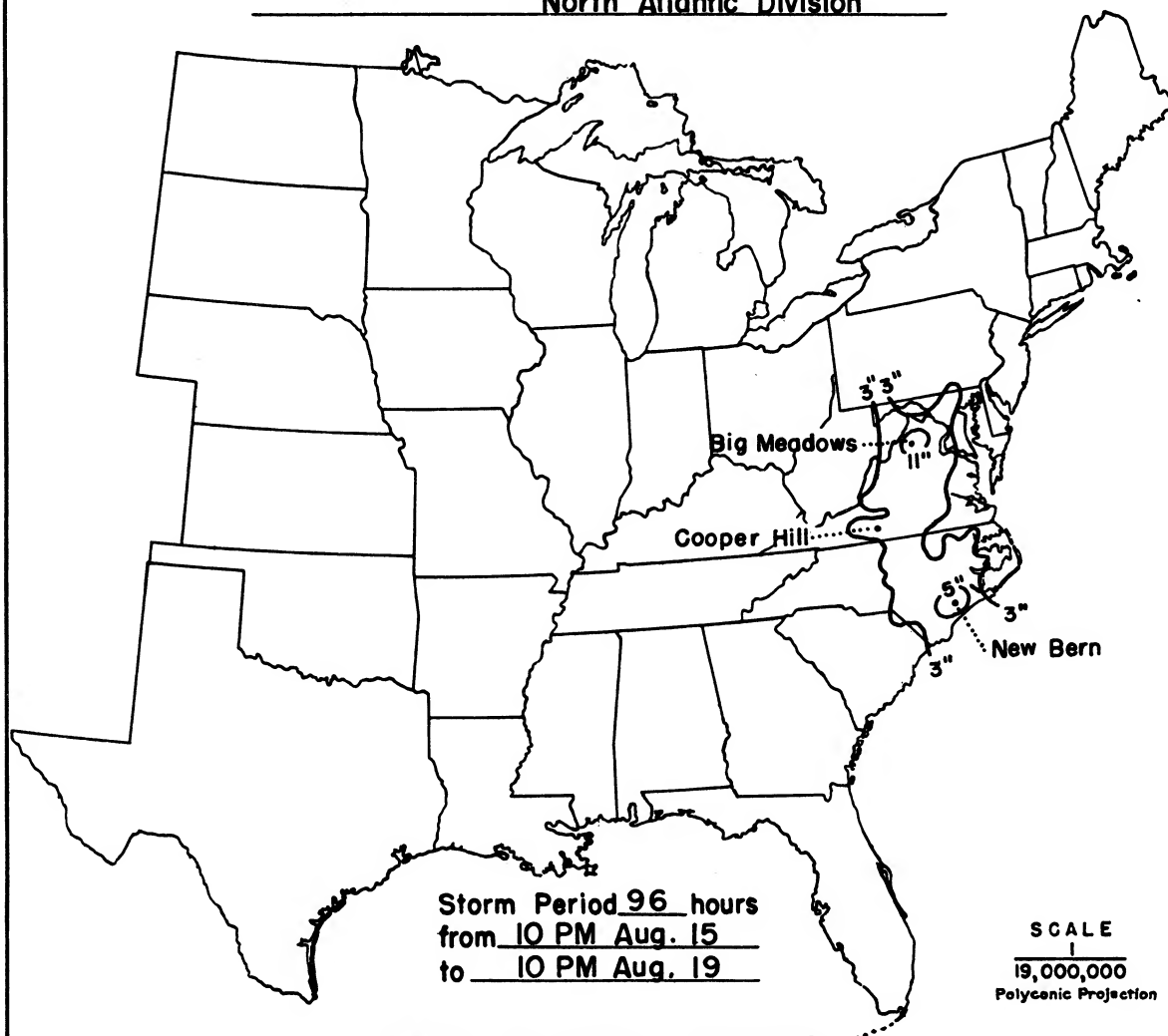
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	14
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

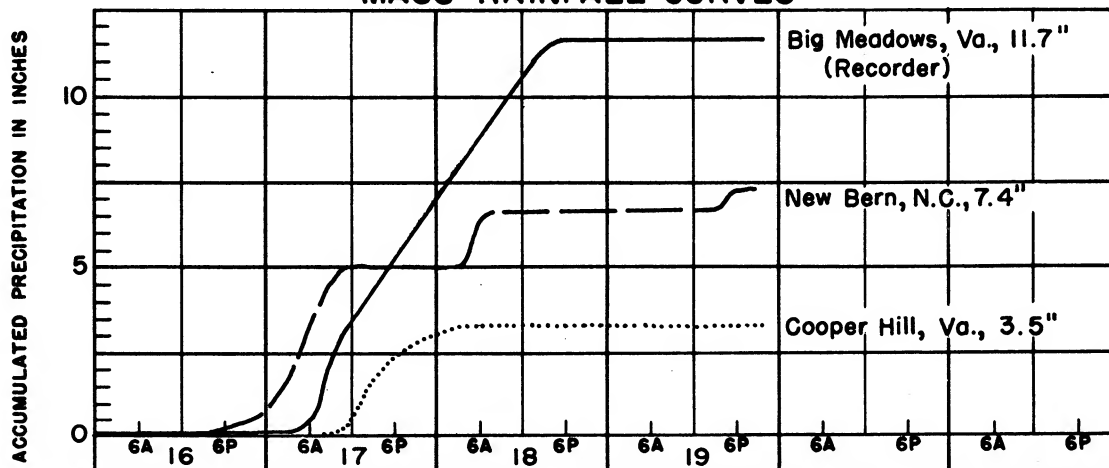
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

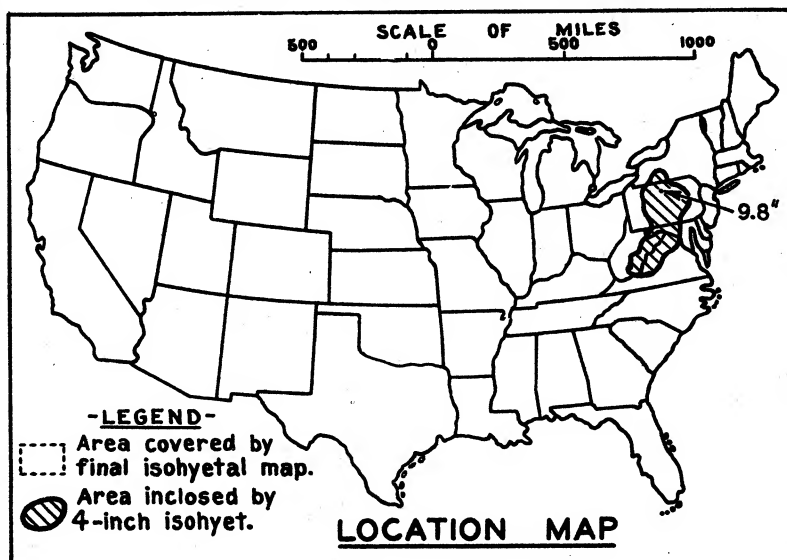
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	66	72	96
Max. Station	3.9	5.7	7.5	8.7	9.9	11.3	11.5	11.7	11.7	11.7	11.7
10	3.2	5.5	7.0	8.5	9.8	10.9	11.3	11.4	11.5	11.5	11.5
100	2.6	4.8	6.2	7.8	8.9	9.8	10.3	10.5	10.5	10.5	10.5
200	2.5	4.5	5.8	7.1	8.1	9.0	9.4	9.6	9.6	9.6	9.6
500	2.4	4.2	5.2	6.1	6.9	7.5	7.9	8.1	8.2	8.2	8.2
1,000	2.3	3.9	4.8	5.5	6.2	6.5	6.8	7.0	7.1	7.1	7.1
2,000	2.2	3.6	4.5	5.1	5.5	5.8	6.1	6.3	6.4	6.4	6.4
5,000	2.1	3.3	4.2	4.7	4.9	5.1	5.4	5.6	5.6	5.6	5.6
10,000	2.0	3.0	3.9	4.3	4.6	4.8	5.1	5.2	5.3	5.3	5.3
20,000	1.7	2.7	3.5	3.9	4.2	4.4	4.8	4.9	5.0	5.0	5.0
50,000	1.0	2.0	2.6	3.1	3.4	3.6	3.9	4.1	4.2	4.2	4.2

STORM STUDIES - ISOHYETAL MAP

Storm of 15-19 August 1955 Assignment NA 2-22BStudy Prepared by: Norfolk, Va., DistrictNorth Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 30-June 1, 1889

Assignment SA 1-1

Location N.Y., Pa., Md., Va. & W. Va.

Study Prepared by:

Middle Atlantic Division

Baltimore District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/15/41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/29/43

Remarks: Centers at

Wellsboro, Pa. and

McConnellsburg, Pa.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	0
Form 5001-B (24-hour " ")-----	22
Form 5001-D (" " " ")-----	0
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	22

PART II

Final isohyetal maps, in 1 sheet, scale 1:2,500,000

Data and computation sheets:

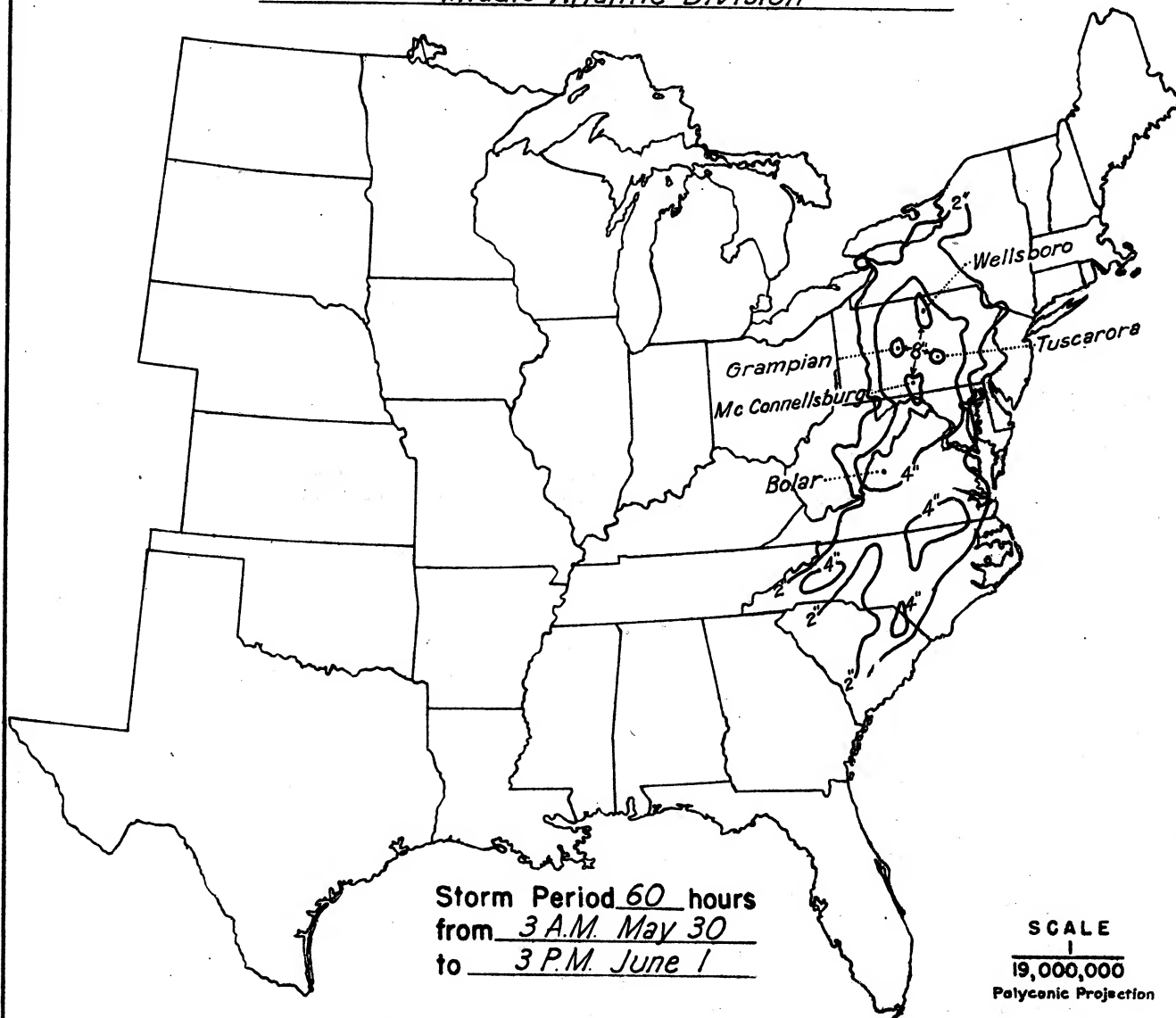
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

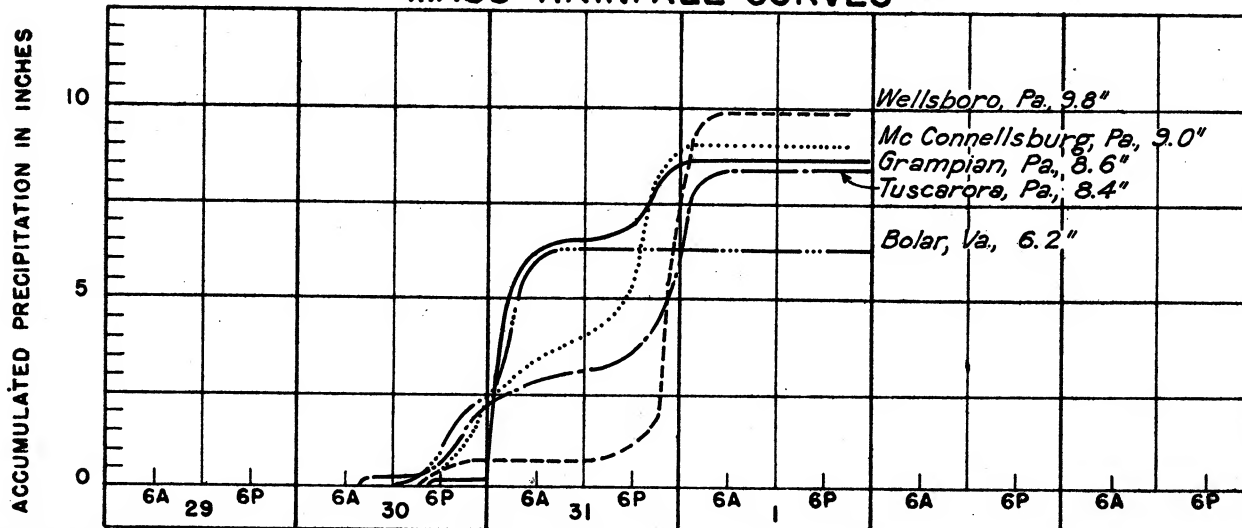
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	60	
10	7.4	8.6	9.1	9.2	9.2	9.2	9.8	9.8	
100	7.0	7.8	8.4	8.5	8.5	8.6	8.9	8.9	
200	6.8	7.5	8.2	8.3	8.3	8.5	8.7	8.7	
500	6.4	7.0	7.9	8.0	8.0	8.2	8.4	8.4	
1,000	6.0	6.6	7.6	7.8	7.8	8.1	8.2	8.2	
2,000	5.5	6.1	7.4	7.6	7.6	7.9	8.0	8.0	
5,000	4.0	5.0	5.9	6.5	7.3	7.6	7.7	7.7	
10,000	2.5	4.0	4.8	5.4	7.0	7.4	7.5	7.5	
20,000	1.9	3.3	4.0	4.6	6.4	6.9	7.0	7.0	
50,000	1.4	2.4	3.1	3.6	4.7	5.2	5.4	5.4	
80,000	1.1	2.0	2.7	3.1	3.7	4.1	4.4	4.4	

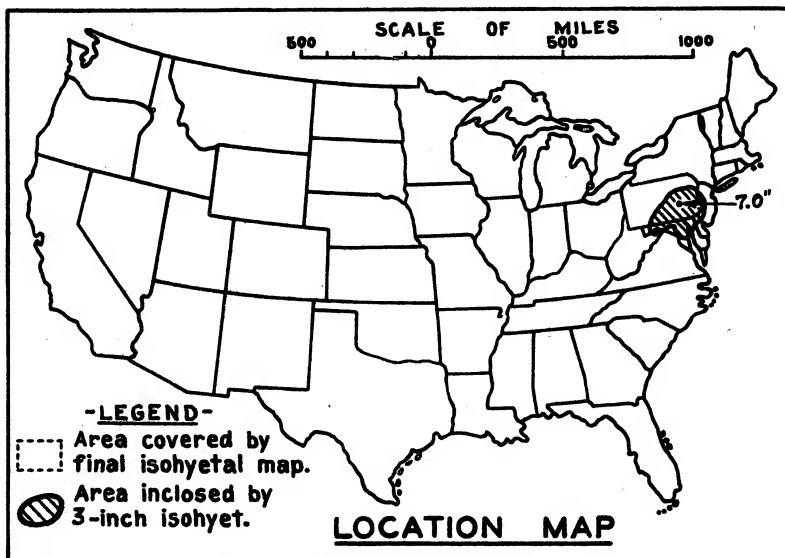
STORM STUDIES - ISOHYETAL MAP

Storm of May 30 - June 1, 1889 Assignment SA-1-1
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Aug. 3-5, 1898

Assignment SA 1-4

Location Pa. & N. J.

Study Prepared by:

Middle Atlantic Division
Baltimore District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 10-4-39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3-20-44

Remarks: Centers at

Girardville, Pa. and

Camden, N.J.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	2
Form 5001-B (24-hour " ")-----	16
Form 5001-D (" " " ")-----	0
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	16

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

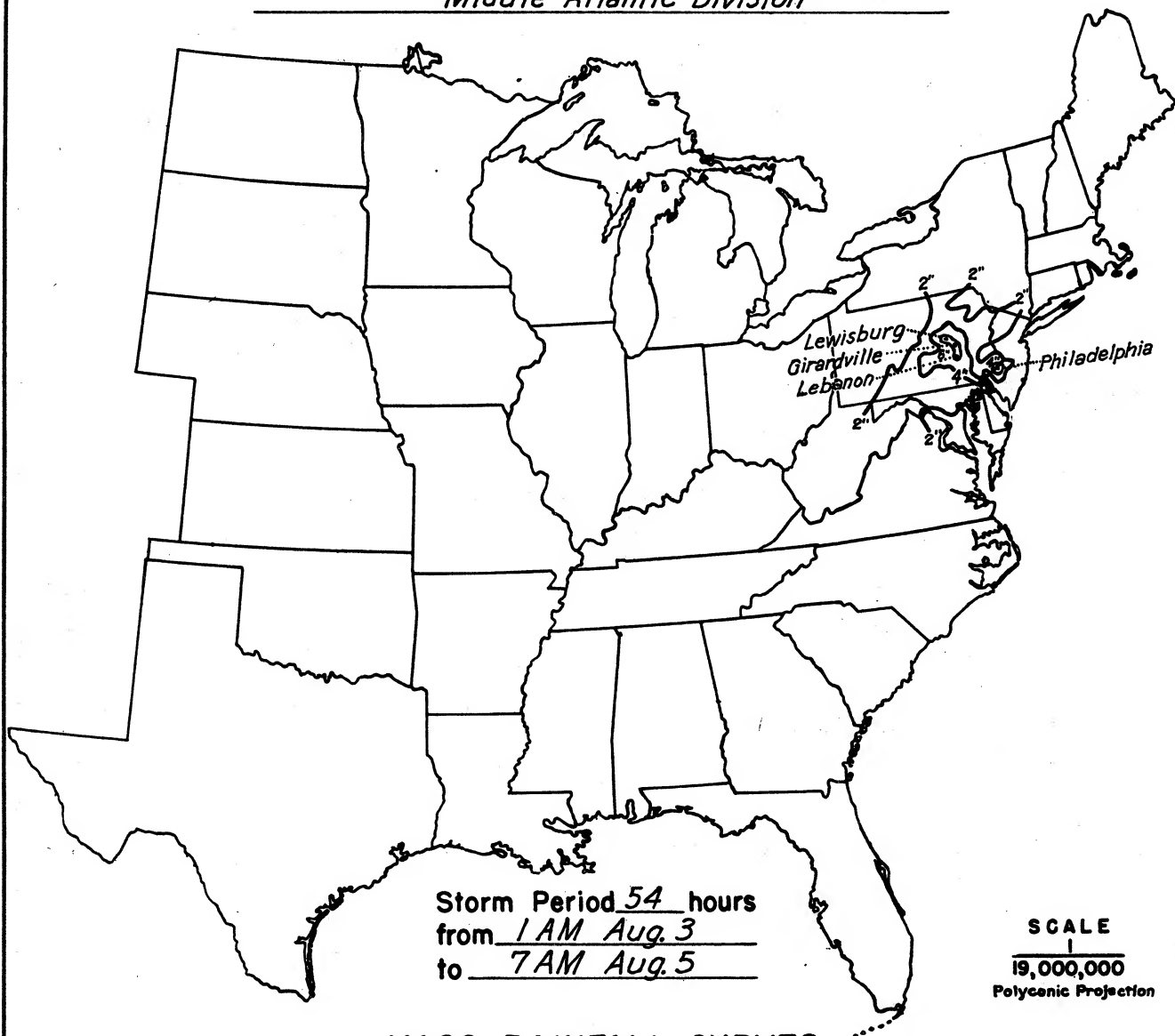
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

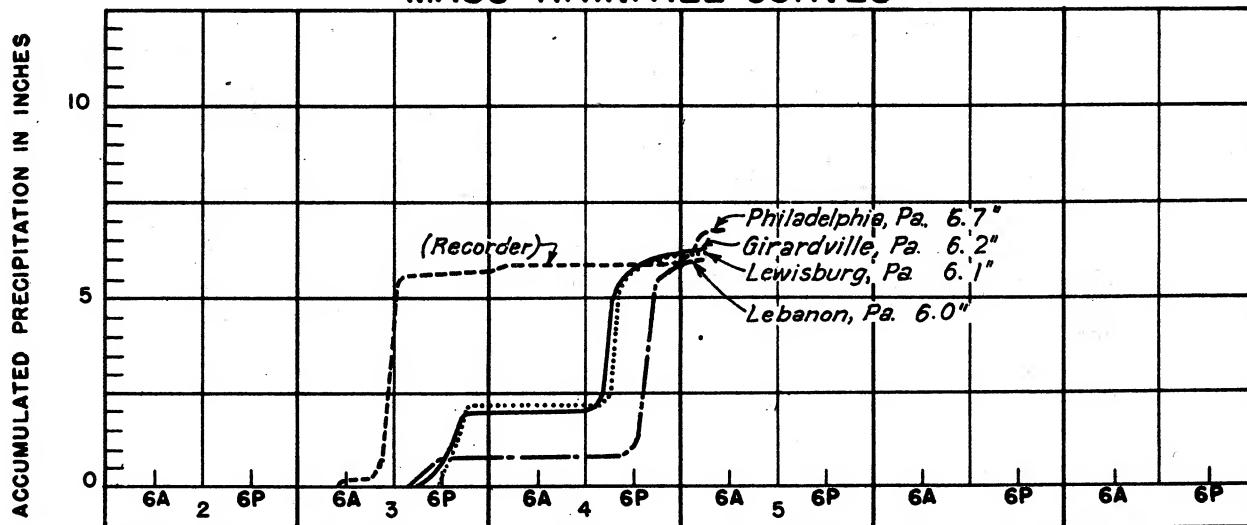
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	42	48	54	
Max. station	* 5.5	* 5.6	* 5.8	* 5.9	* 6.0	6.2	6.2	* 6.9	* 7.0	
20	* 5.1	* 5.2	* 5.3	* 5.4	5.8	6.2	6.2	* 6.3	* 6.4	
50	* 4.7	5.0	5.0	5.2	5.8	6.2	6.2	6.2	6.2	
100	* 4.3	4.9	4.9	5.0	5.7	6.2	6.2	6.2	6.2	
200	* 3.7	4.8	4.8	4.9	5.6	6.1	6.2	6.1	6.1	
500	3.2	4.5	4.5	4.6	5.4	6.1	6.1	6.1	6.1	
1,000	2.9	4.2	4.2	4.3	5.1	6.0	6.0	6.0	6.0	
2,000	2.6	3.8	3.8	3.9	4.6	5.4	5.5	5.7	5.7	
5,000	2.1	3.2	3.2	3.4	3.9	4.6	4.8	5.0	5.0	
10,000	1.8	2.7	2.8	2.9	3.3	3.9	4.1	4.3	4.4	
30,000	1.1	1.8	2.0	2.1	2.5	2.8	3.0	3.1	3.3	

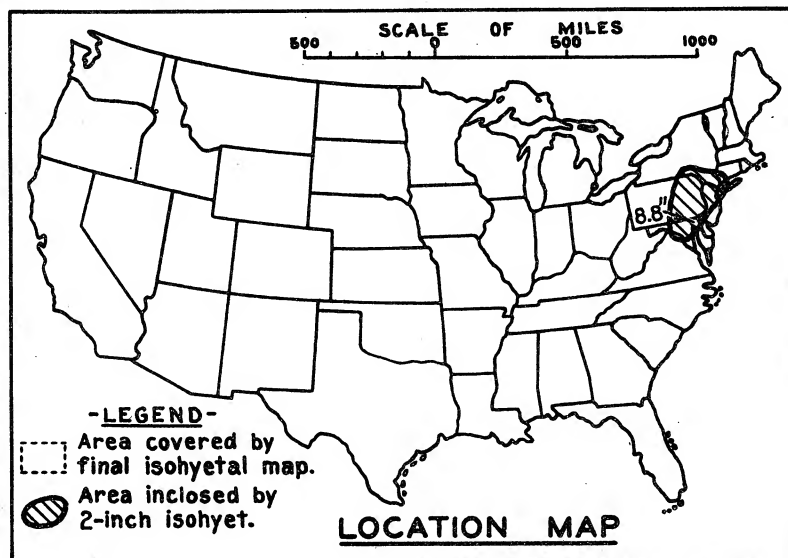
STORM STUDIES - ISOHYETAL MAP

Storm of August 3-5, 1898 Assignment SA 1-4
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 24-27, 1902
 Assignment SA 1-5
 Location Md. - N.Y.
 Study Prepared by:
 Middle Atlantic Division
 Baltimore District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 1/4/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/16/44

Remarks: Centers at
 Colora, Md. and
 Laurel, Md.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	4
Form 5001-B (24-hour " ")-----	20
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	21

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

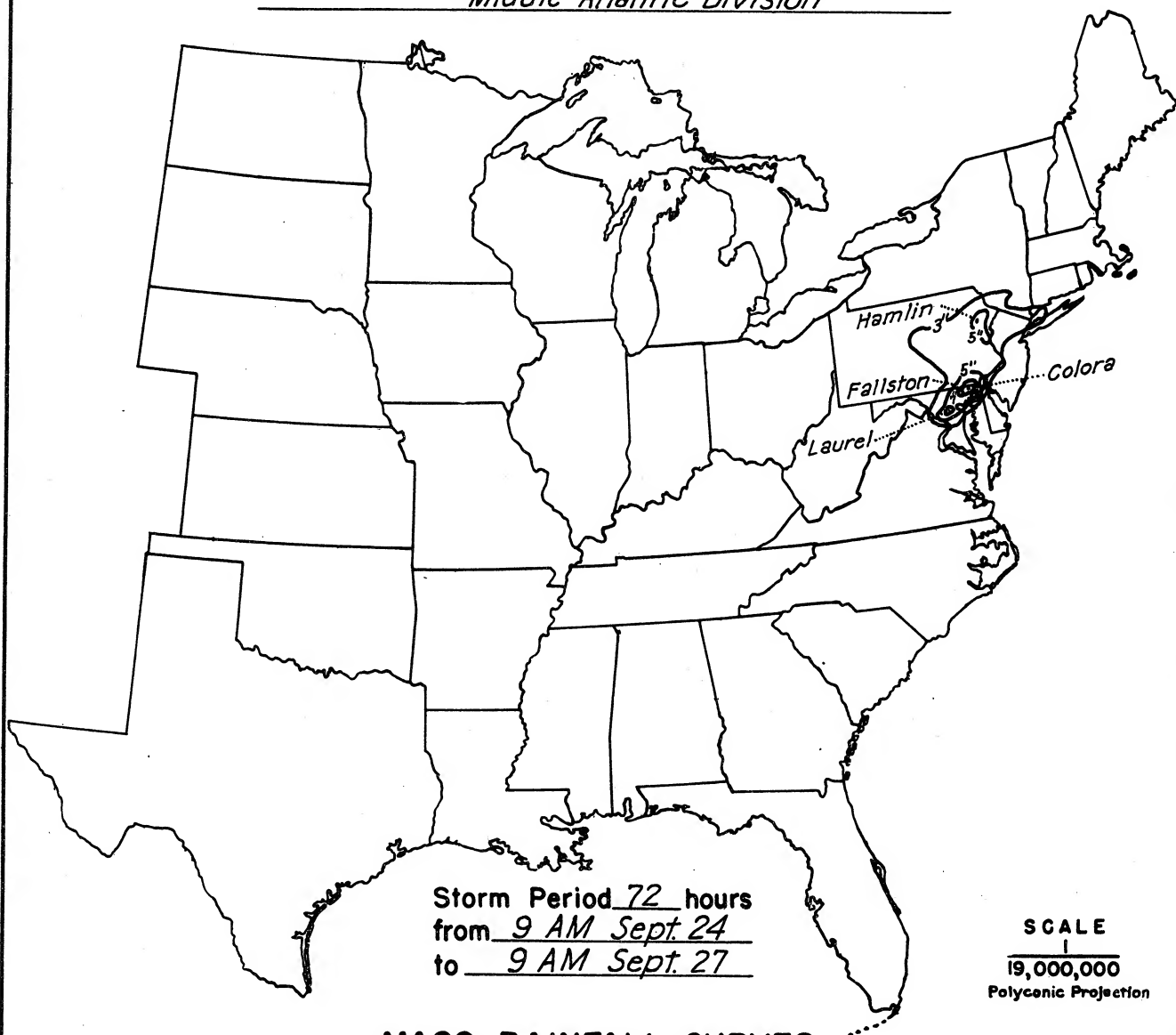
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

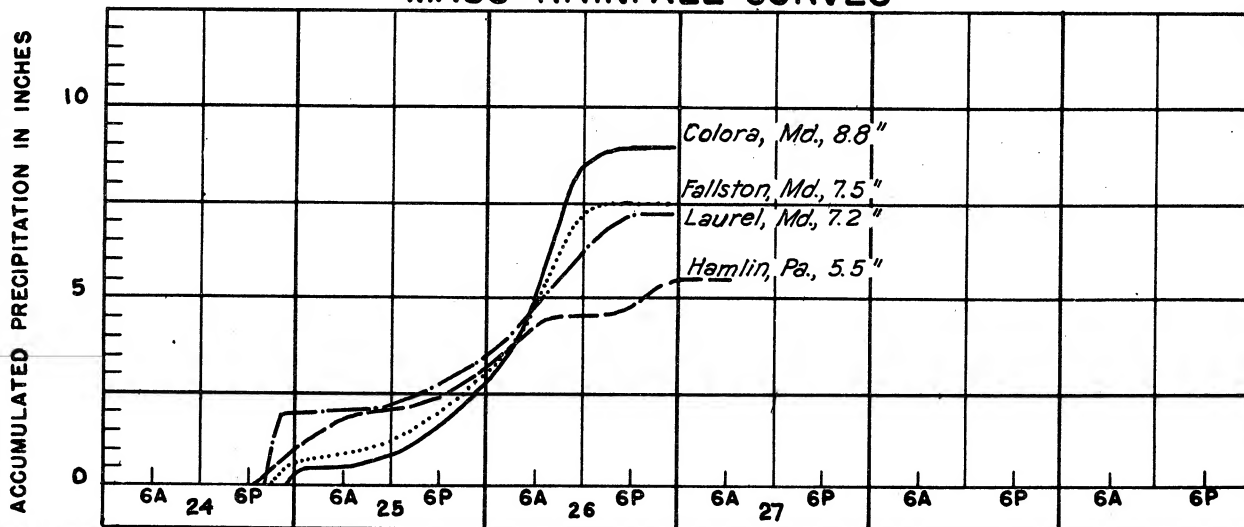
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	5.6	6.4	7.0	7.8	8.1	8.4	8.8	8.8	8.8		
50	5.3	6.0	6.6	7.4	7.7	8.0	8.5	8.5	8.5		
100	5.1	5.8	6.4	7.1	7.5	7.8	8.3	8.3	8.3		
200	4.8	5.5	6.1	6.8	7.3	7.5	8.0	8.0	8.0		
500	4.3	5.0	5.6	6.2	6.8	7.0	7.6	7.6	7.6		
1,000	3.6	4.4	5.0	5.6	6.3	6.5	7.1	7.1	7.1		
2,000	2.6	3.6	4.3	4.9	5.7	5.8	6.5	6.5	6.5		
5,000	1.5	2.5	3.2	3.9	4.6	4.8	5.6	5.6	5.7		
10,000	1.1	1.9	2.5	3.2	3.6	4.0	4.8	4.9	5.1		
20,000	0.7	1.4	1.8	2.4	2.8	3.3	4.0	4.2	4.4		
40,000	0.5	1.0	1.3	1.7	2.0	2.5	3.2	3.4	3.7		

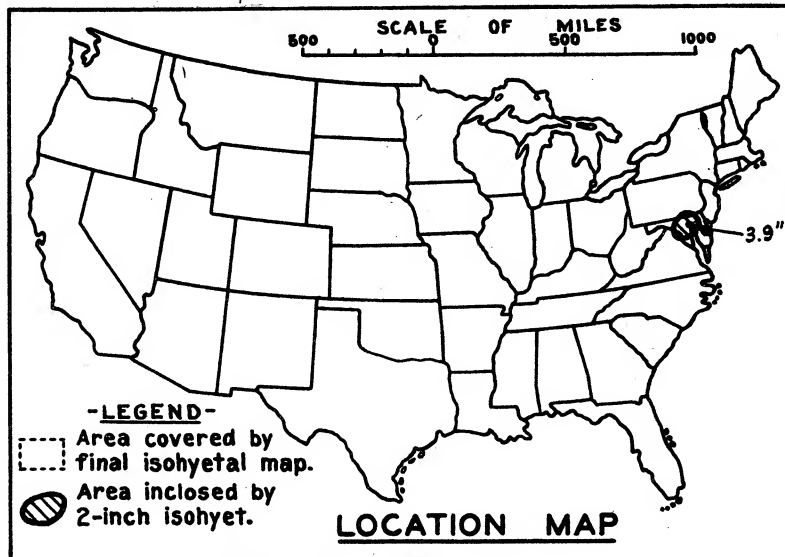
STORM STUDIES - ISOHYETAL MAP

Storm of September 24-27, 1902 Assignment SA 1-5
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 12, 1903
 Assignment SA 1-6
 Location Maryland
 Study Prepared by:
 Middle Atlantic Division
 Baltimore District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/28/39
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 6/30/44
 Remarks: Center at
 Baltimore, Md.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data).....	1
Form 5001-B (24-hour " ").....	5
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	5

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

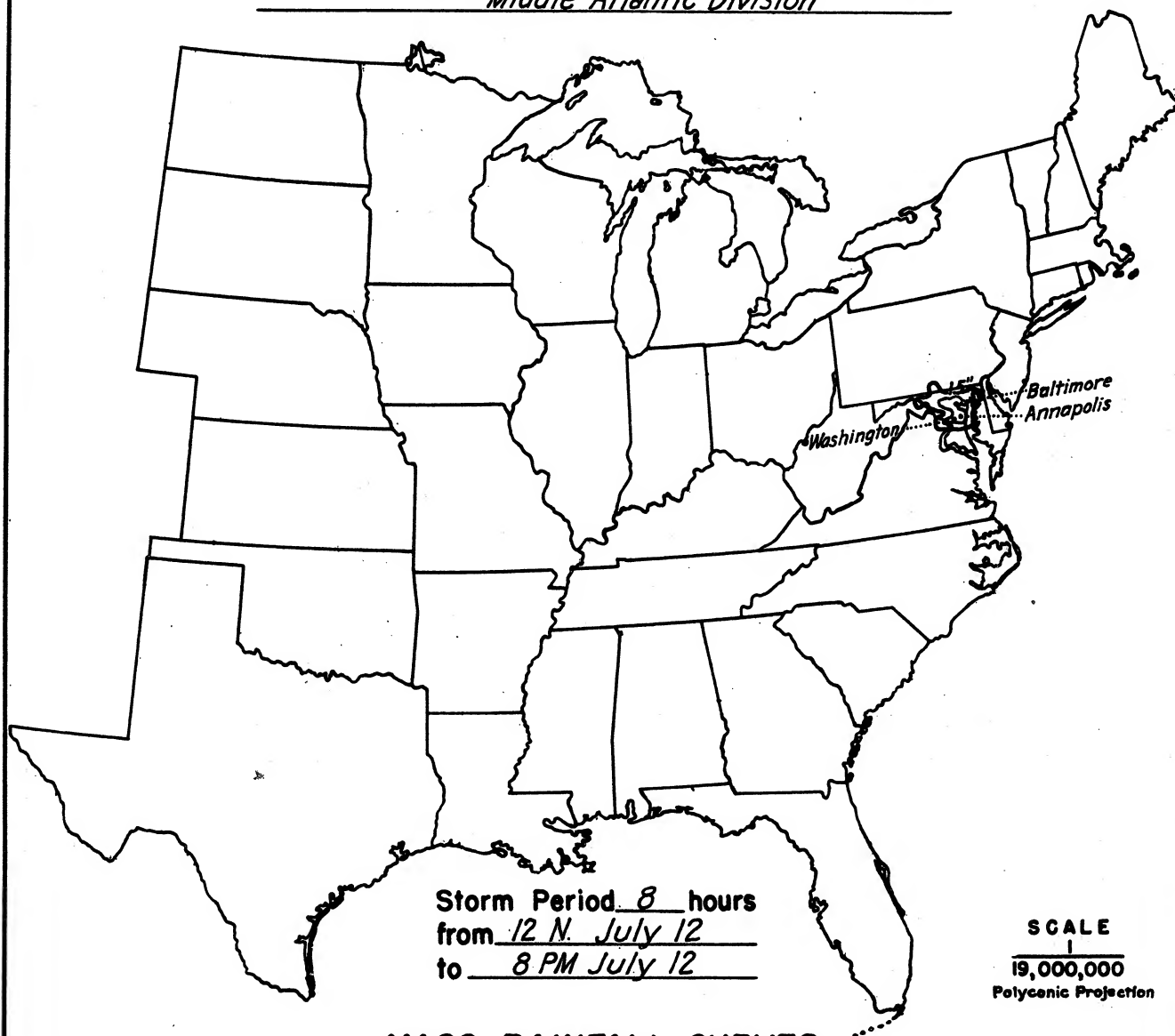
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	1
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

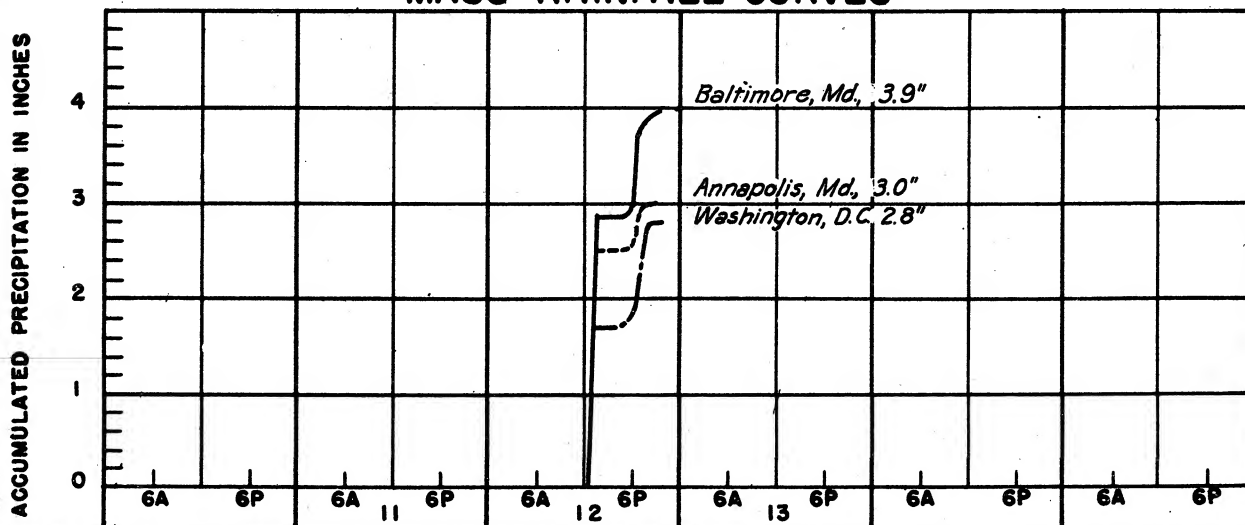
Area in Sq. Mi.	Duration of Rainfall in Hours										
	1	2	3	4	5	6	7	8			
10	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.9			
100	2.8	2.8	2.8	2.8	2.8	2.8	3.5	3.6			
400	2.7	2.7	2.7	2.7	2.7	2.7	3.3	3.4			
1,000	2.3	2.3	2.3	2.3	2.3	2.4	3.0	3.1			
4,000	1.1	1.3	1.3	1.5	1.8	1.9	2.2	2.3			

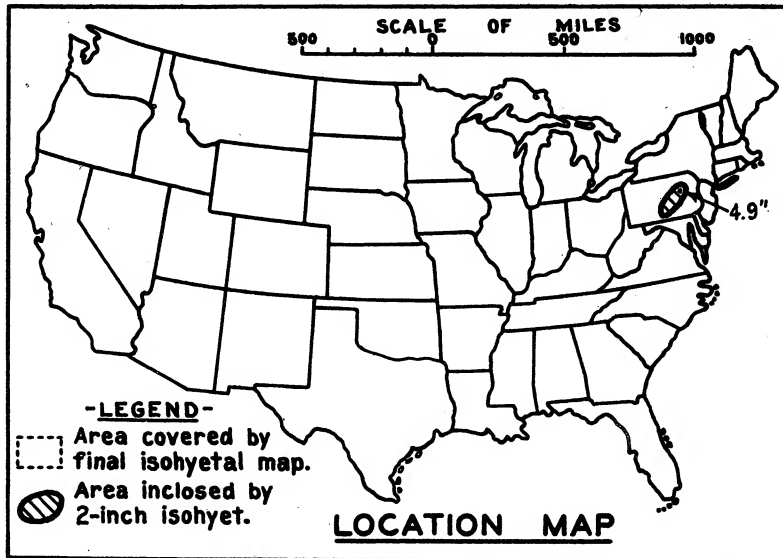
STORM STUDIES - ISOHYETAL MAP

Storm of July 12, 1903 Assignment SA 1-6
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 21-22, 1915

Assignment SA 1-7

Location Pennsylvania

Study Prepared by:

Middle Atlantic Division

Baltimore District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/28/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/3/44

Remarks: Center at

Gordon, Pa.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 2

Form 5001-B (24-hour " ")----- 2

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 2

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 1

Maximum duration-depth-area curves----- 1

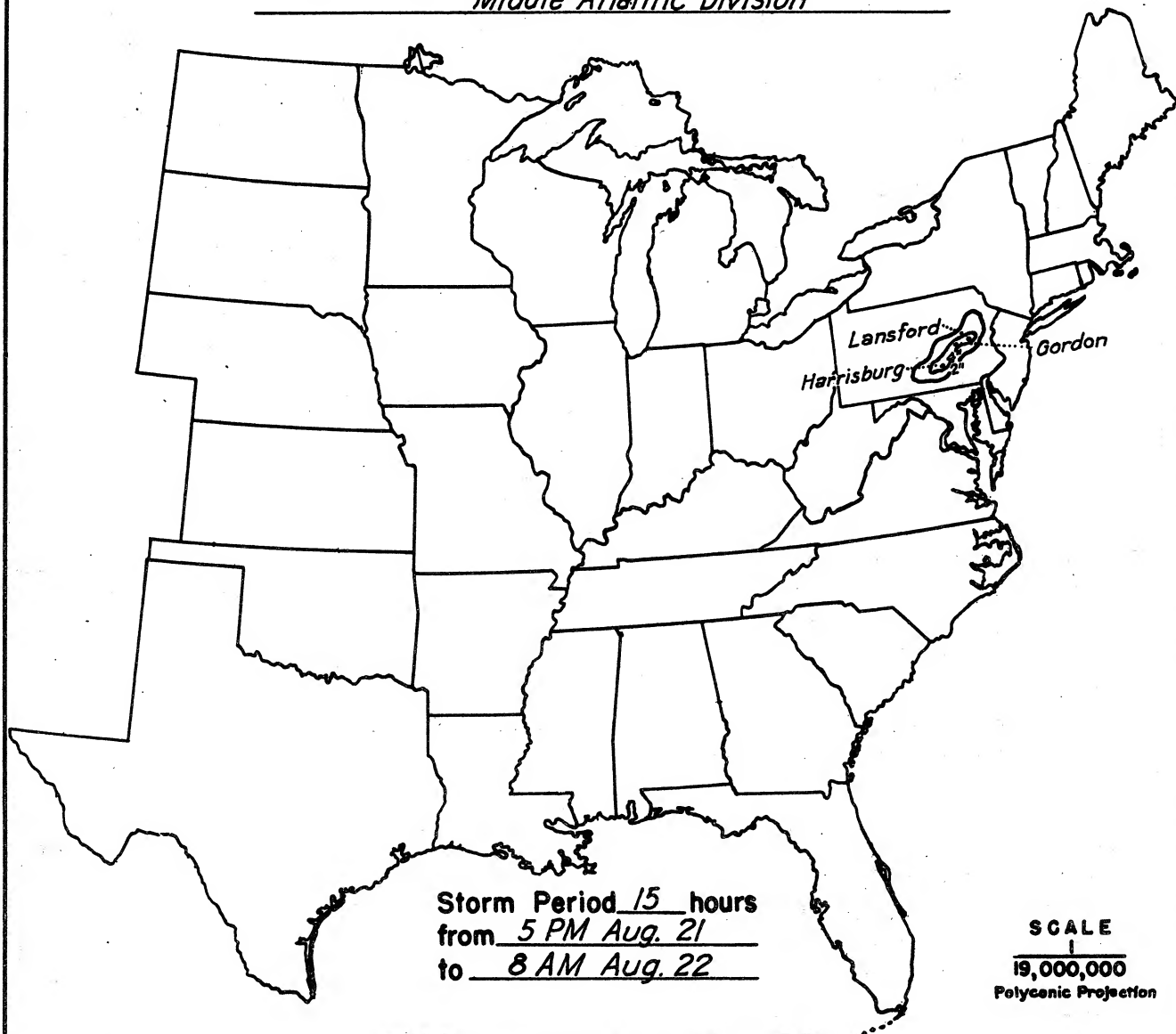
Data relating to periods of maximum rainfall----- 1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

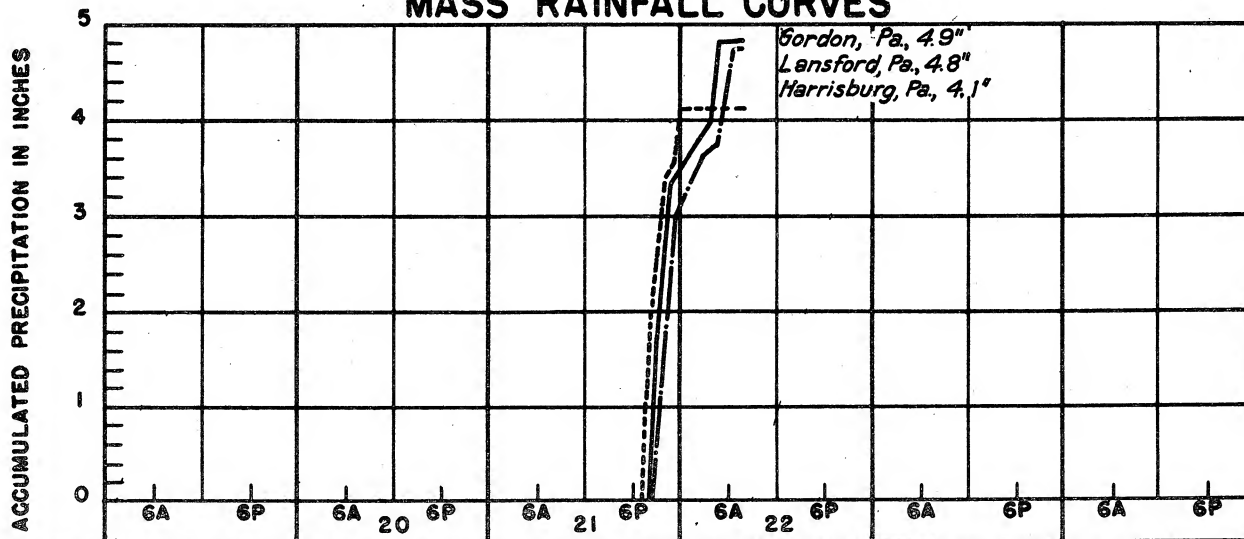
Area in Sq. Mi.	Duration of Rainfall in Hours									
	1	2	3	4	5	6	9	12	15	
10	1.8	2.6	3.4	3.6	4.1	4.6	4.8	4.9	4.9	
50	1.5	2.4	3.3	3.5	4.0	4.3	4.5	4.8	4.8	
100	1.4	2.3	3.2	3.5	3.9	4.2	4.4	4.7	4.8	
200	1.2	2.2	3.1	3.4	3.8	4.0	4.3	4.6	4.7	
500	1.0	2.0	2.9	3.3	3.7	3.8	4.1	4.5	4.6	
1,000	0.9	1.8	2.6	3.1	3.4	3.6	3.8	4.3	4.4	
2,000	0.8	1.5	2.2	2.7	3.1	3.2	3.5	3.9	4.0	
5,000	0.6	1.1	1.6	2.0	2.3	2.4	2.9	3.1	3.2	

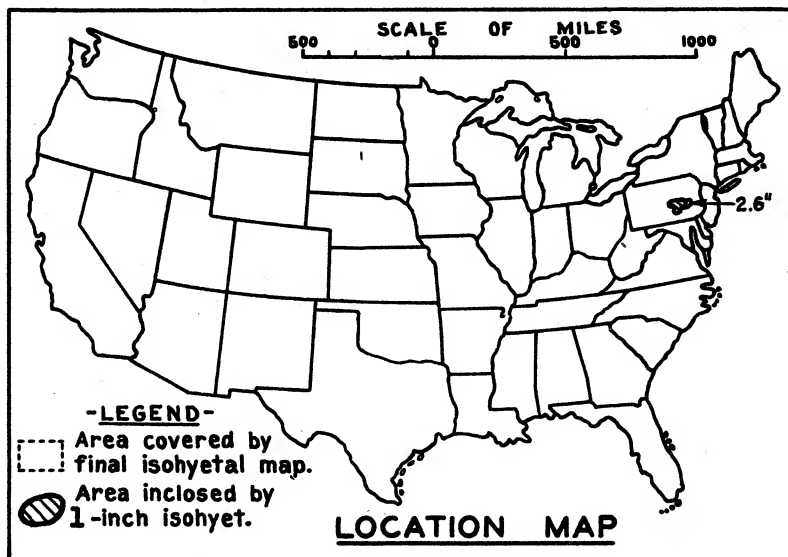
STORM STUDIES - ISOHYETAL MAP

Storm of August 21-22, 1915 Assignment SA 1-7
Study Prepared by: Baltimore, Md., District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 18, 1920
 Assignment SA 1 - 8
 Location S.E. Pennsylvania
 Study Prepared by:
 Middle Atlantic Division
 Baltimore District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/28/39
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/16/44

Remarks: Center at
 Lancaster, Pa. and
 Harrisburg, Pa.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	1
Form 5001-B (24-hour " ").....	1
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	1

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

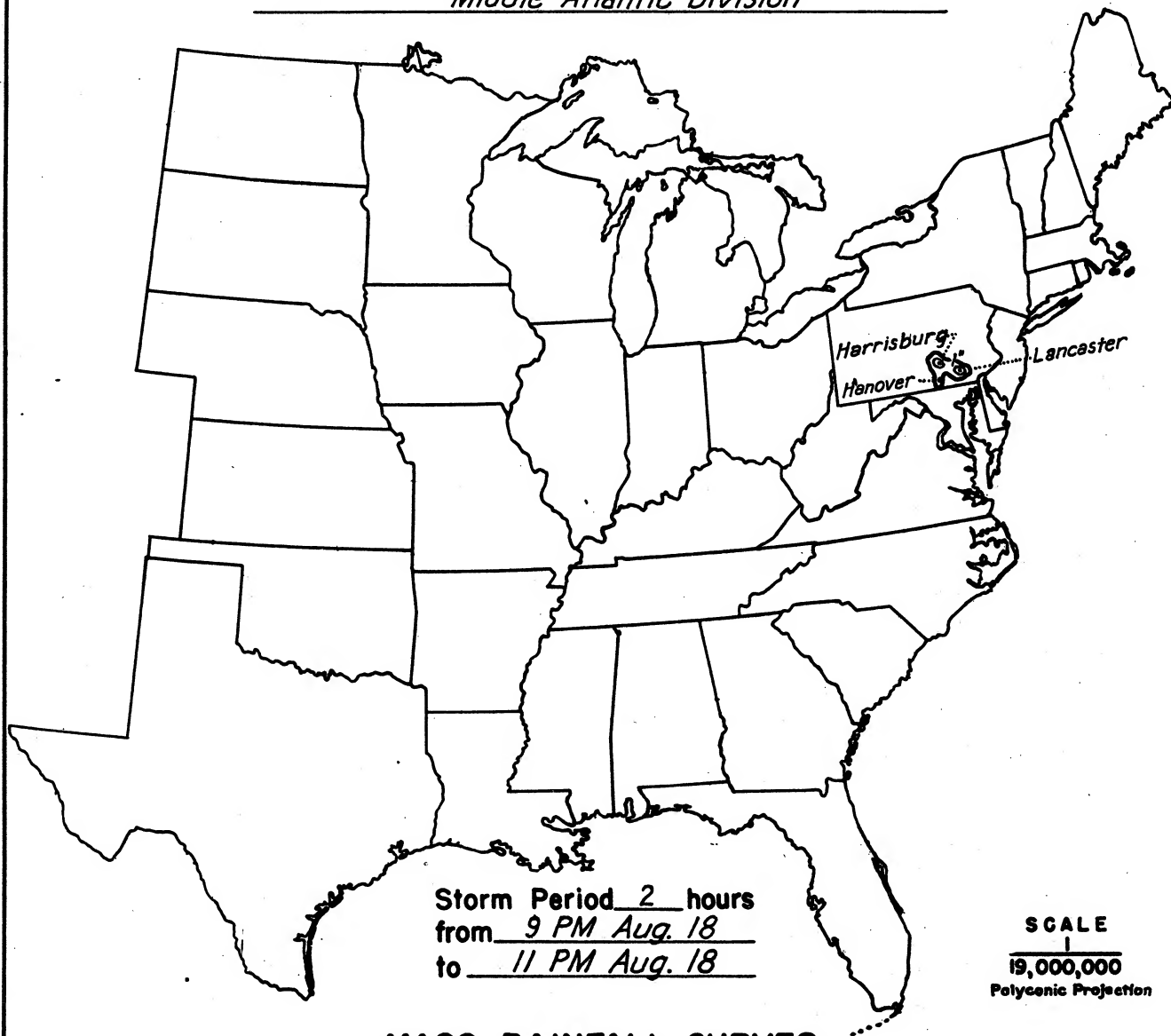
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	1
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	-

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

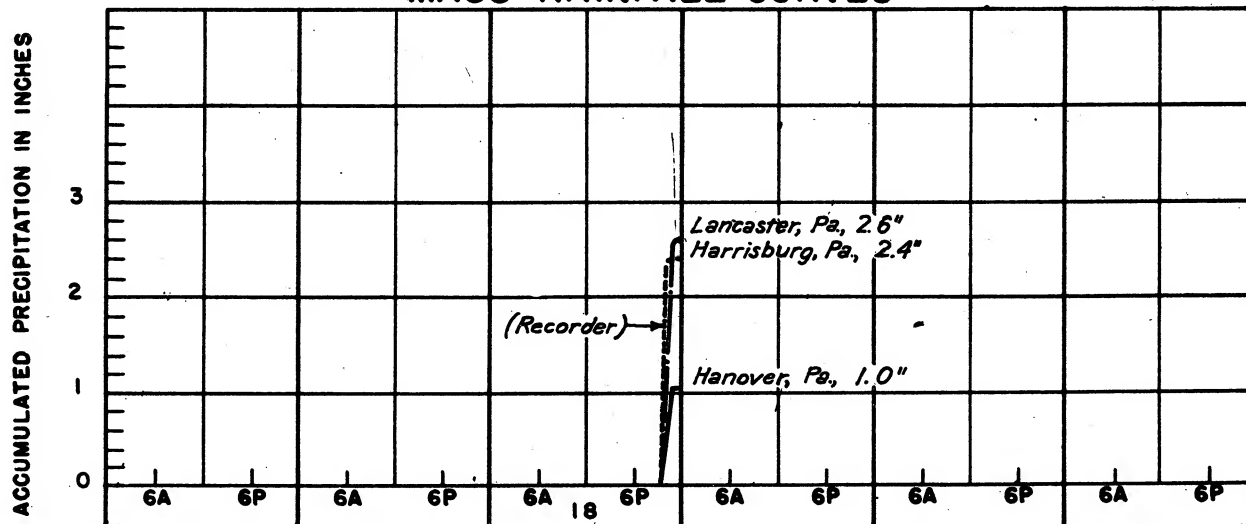
Area in Sq. Mi.	Duration of Rainfall in Hours									
	1	2								
10	2.3	2.6								
50	2.2	2.5								
100	2.1	2.4								
200	2.0	2.2								
500	1.7	1.9								
1,000	1.4	1.7								
1,400	1.3	1.6								

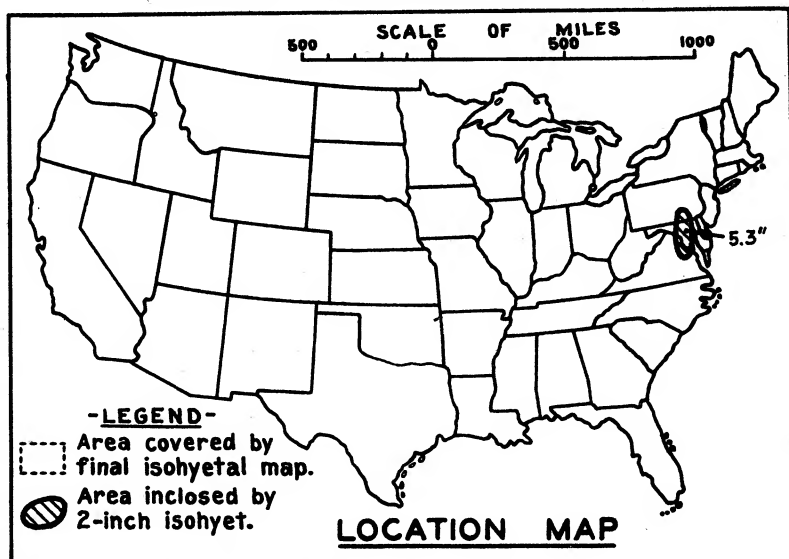
STORM STUDIES - ISOHYETAL MAP

Storm of August 18, 1920 Assignment SA 1-8
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 9-10, 1922

Assignment SA 1-9

Location Maryland

Study Prepared by:

Middle Atlantic Division

Baltimore District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/28/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/7/44

Remarks: Centers at

Baltimore, Md. and

Ferry Landing, Md.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	2
Form 5001-B (24-hour " ")-----	5
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	5

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

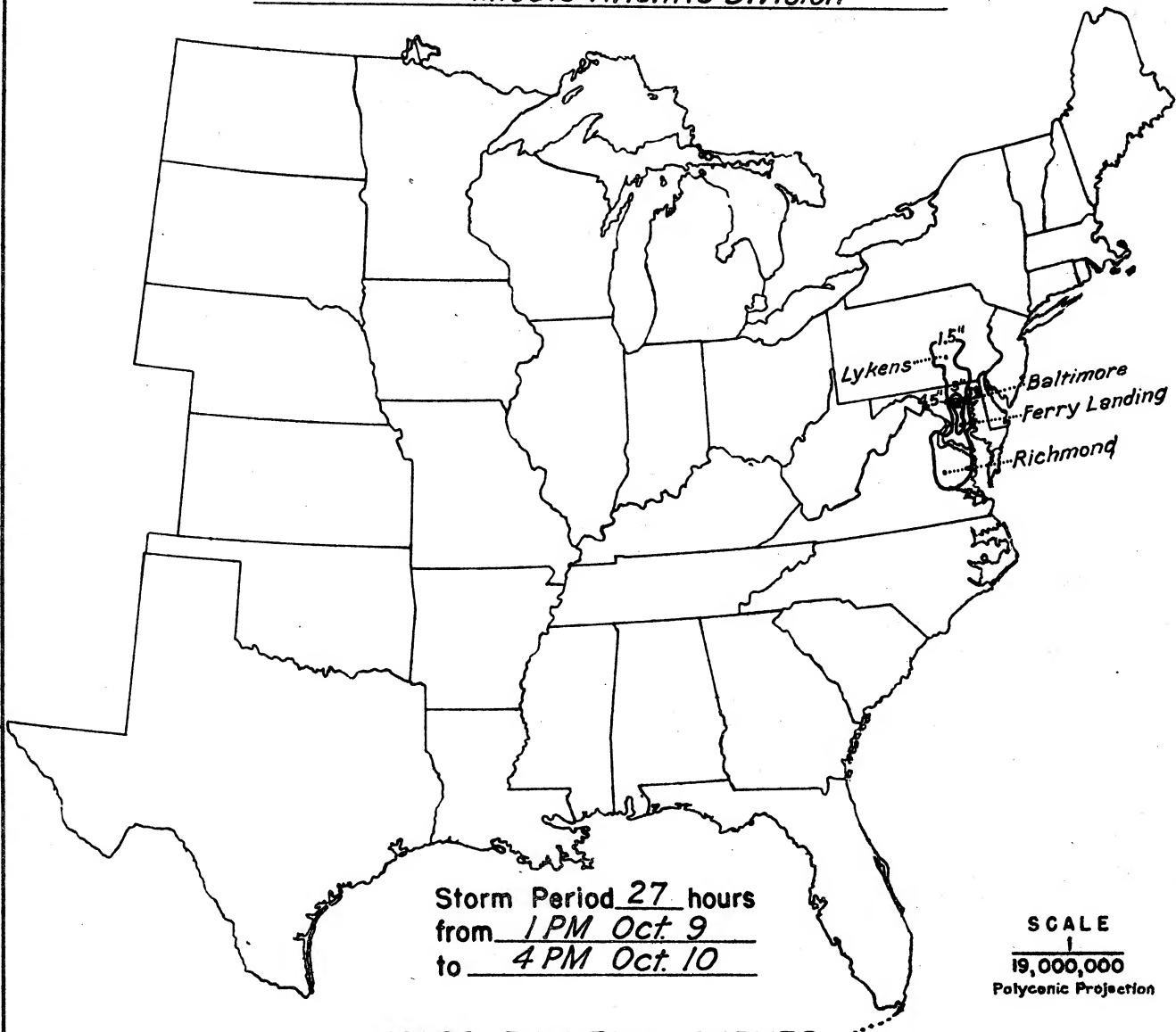
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

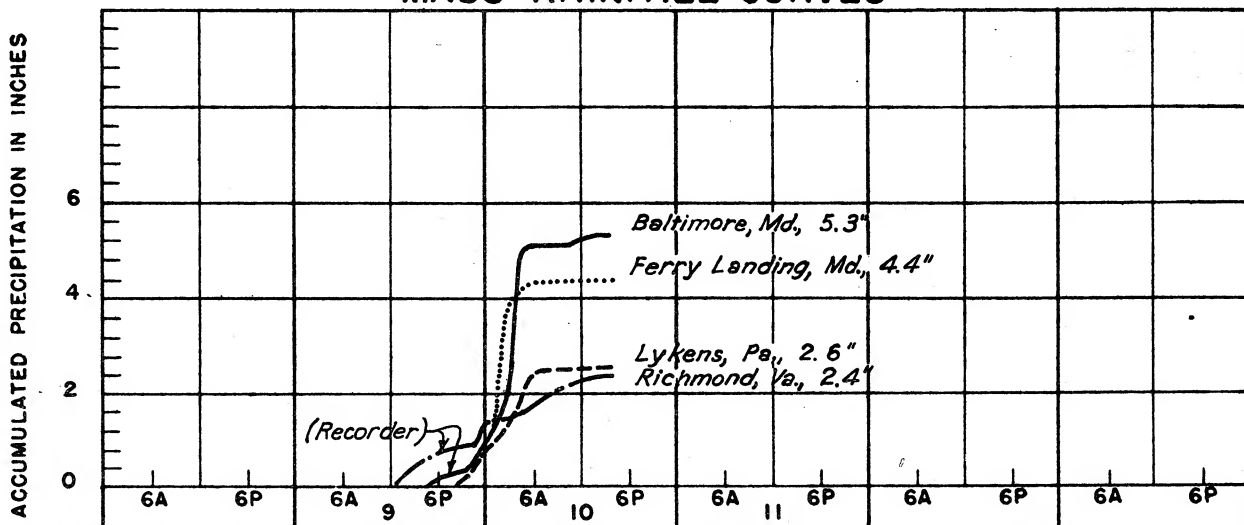
Area in Sq. Mi.	Duration of Rainfall in Hours										
	1	2	3	4	5	6	8	10	12	18	24/27
10	2.1	3.2	4.1	4.2	4.3	4.6	5.0	5.0	5.2	5.2	5.3
20	2.0	3.1	4.0	4.1	4.2	4.5	4.9	4.9	5.1	5.1	5.2
50	1.9	3.0	3.8	3.9	4.0	4.3	4.7	4.7	4.9	4.9	5.0
100	1.8	2.8	3.5	3.7	3.8	4.1	4.4	4.4	4.6	4.6	4.6
200	1.6	2.6	3.2	3.4	3.5	3.8	4.0	4.1	4.2	4.2	4.3
500	1.3	2.2	2.5	2.9	3.0	3.2	3.5	3.6	3.7	3.7	3.8
1,000	1.0	1.8	2.0	2.3	2.5	2.7	3.0	3.1	3.2	3.3	3.4
2,000	0.8	1.4	1.6	1.8	2.0	2.2	2.5	2.6	2.7	2.8	3.0
5,000	0.5	0.9	1.1	1.3	1.5	1.7	2.0	2.1	2.2	2.4	2.6
10,000	0.3	0.6	0.8	0.9	1.1	1.3	1.6	1.8	1.9	2.1	2.2
20,000	0.2	0.3	0.5	0.6	0.8	1.0	1.3	1.4	1.5	1.8	1.9

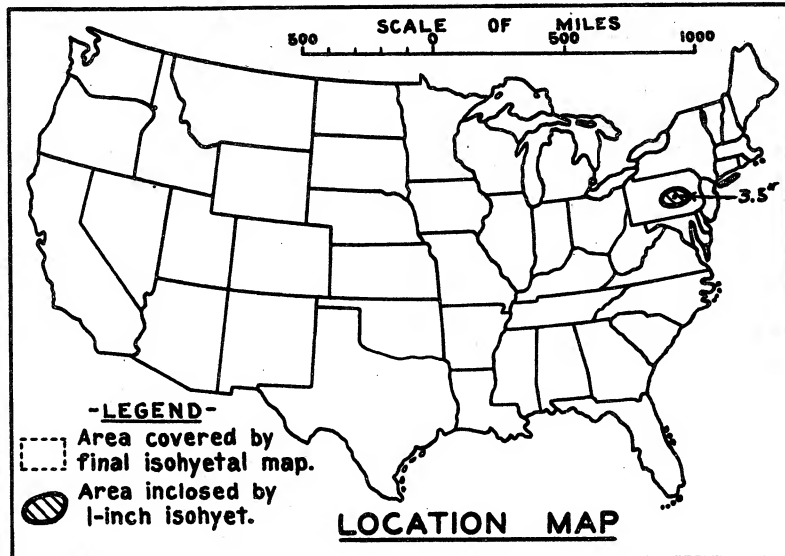
STORM STUDIES - ISOHYETAL MAP

Storm of October 9-10, 1922 Assignment SA 1-9
 Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 8, 1925

Assignment SA 1-10

Location Pennsylvania

Study Prepared by:

Middle Atlantic Division

Baltimore District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/28/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/4/44

Remarks: Center at

Harrisburg, Pa.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	1
Form 5001-B (24-hour " ").....	1
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	1

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

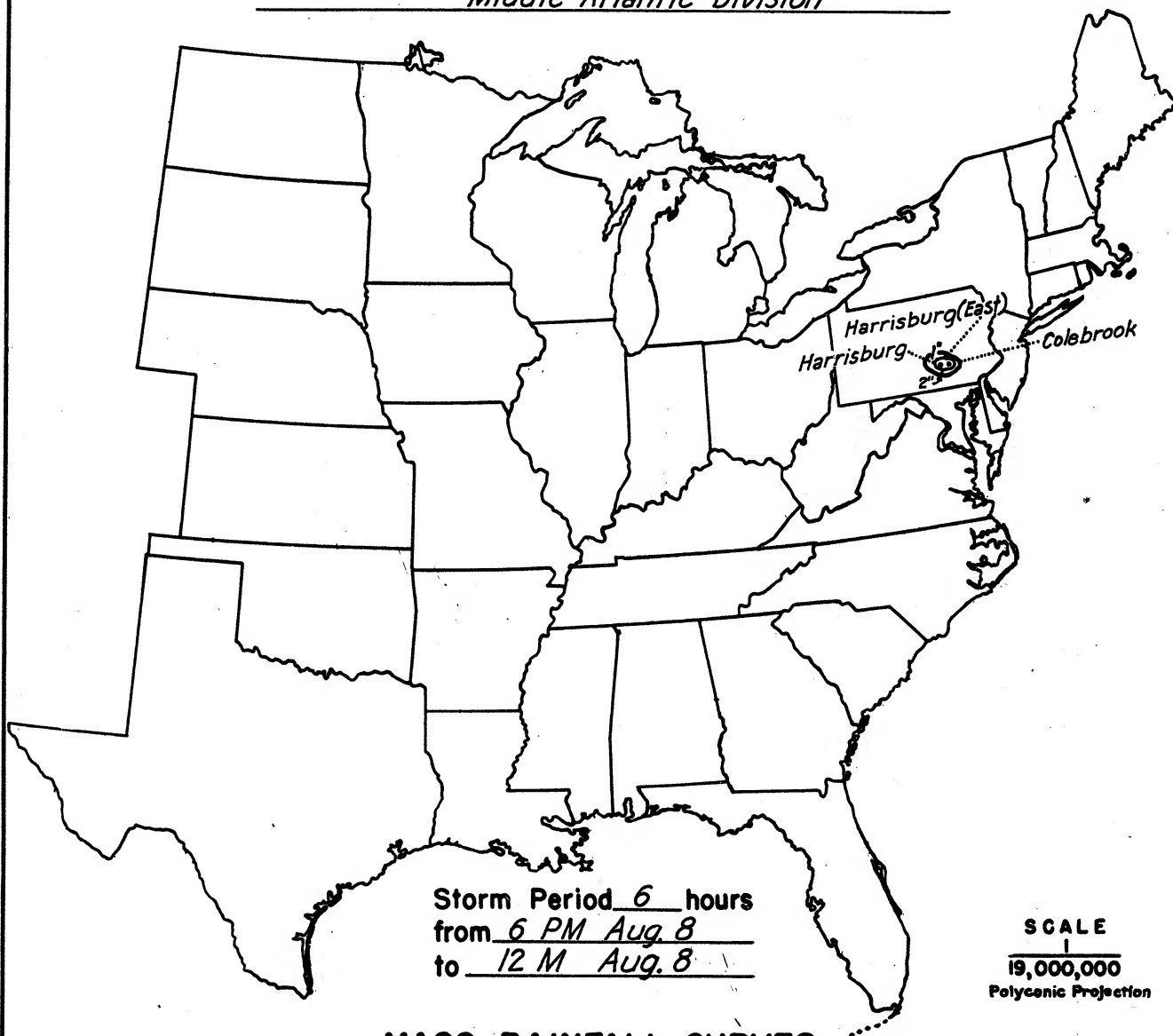
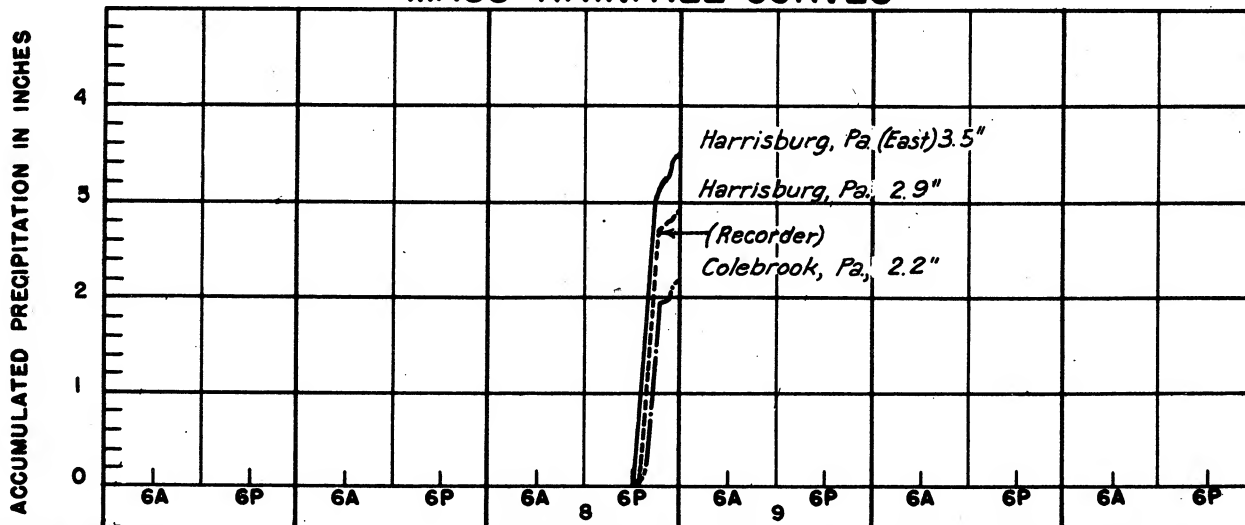
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	1
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	1

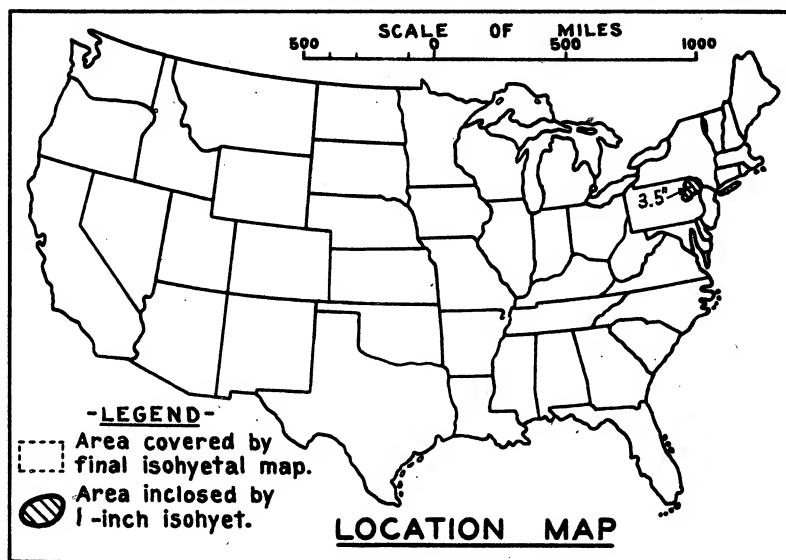
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	1	2	3	4	6					
10	1.7	2.9	3.1	3.2	3.5					
50	1.6	2.8	2.9	3.0	3.3					
100	1.6	2.7	2.8	2.9	3.1					
200	1.5	2.5	2.6	2.7	2.8					
500	1.2	2.0	2.2	2.2	2.3					
1,000	0.9	1.6	1.7	1.8	1.9					

STORM STUDIES - ISOHYETAL MAP

Storm of August 8, 1925 Assignment SA 1-10
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 24, 1933

Assignment SA 1-11

Location N.E. Pennsylvania

Study Prepared by:

Middle Atlantic Division

Baltimore District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11-29-39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3-29-43

Remarks: Centers at

Lakeville, Pa. and
Scranton, Pa.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	1
Form 5001-B (24-hour " ")-----	2
Form 5001-D (" " " ")-----	0
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	2

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

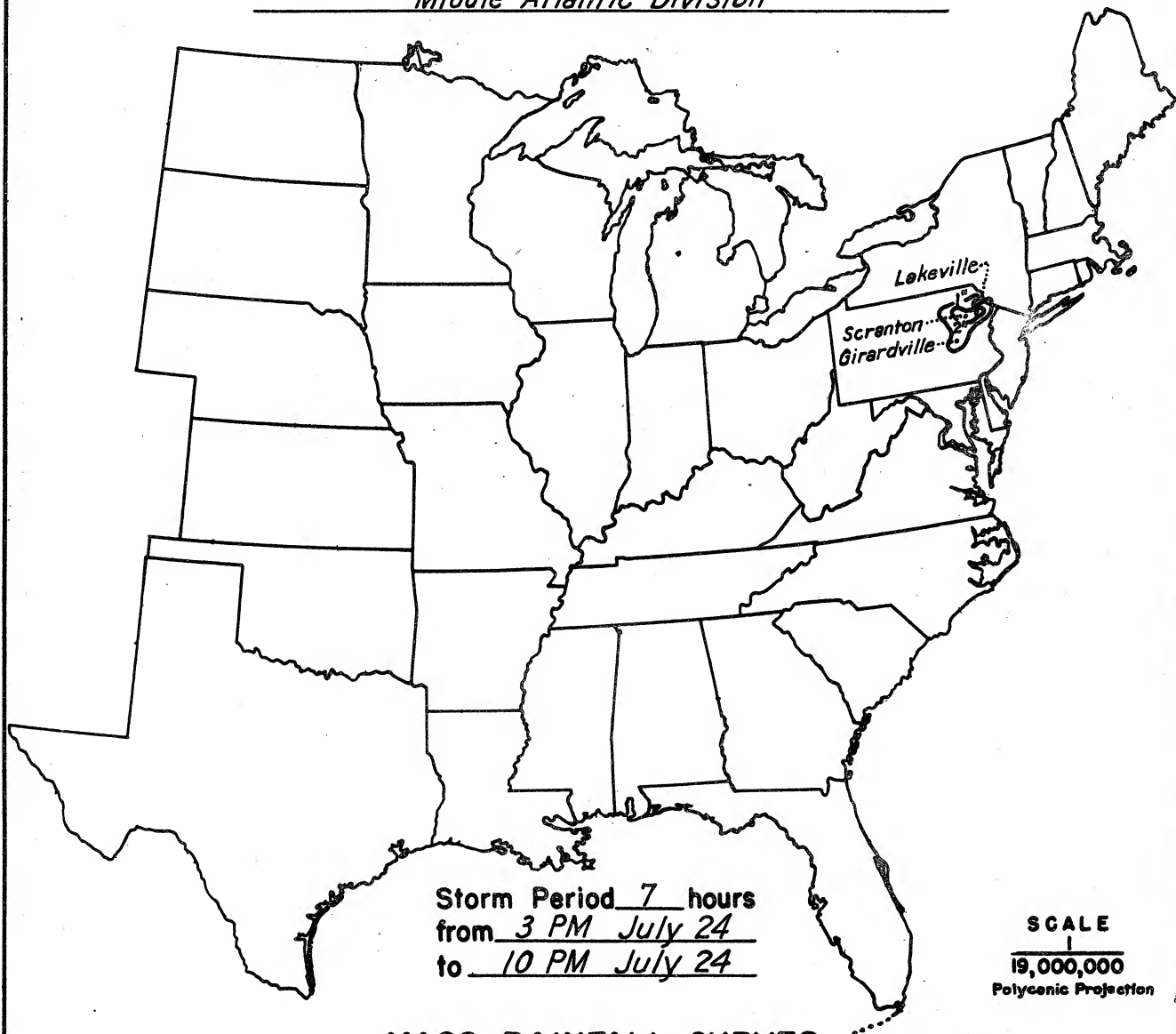
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

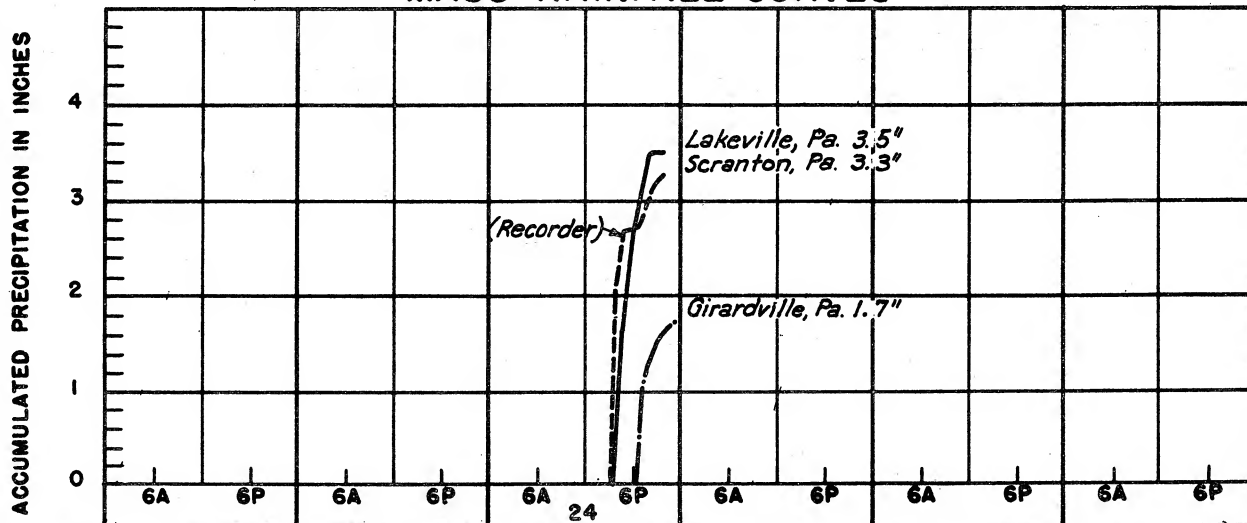
Area in Sq. Mi.	Duration of Rainfall in Hours											
	1	2	3	4	5	6	7					
10	2.0	2.6	2.7	3.0	3.2	3.4	3.5					
50	1.9	2.6	2.6	2.8	3.0	3.2	3.3					
100	1.9	2.5	2.6	2.7	3.0	3.1	3.2					
200	1.8	2.4	2.5	2.6	2.8	3.0	3.1					
500	1.6	2.2	2.4	2.4	2.6	2.8	2.8					
1,000	1.4	2.0	2.1	2.2	2.4	2.5	2.6					
2,000	1.0	1.5	1.7	1.8	2.0	2.1	2.2					
4,000	0.6	0.9	1.1	1.1	1.5	1.7	1.7					

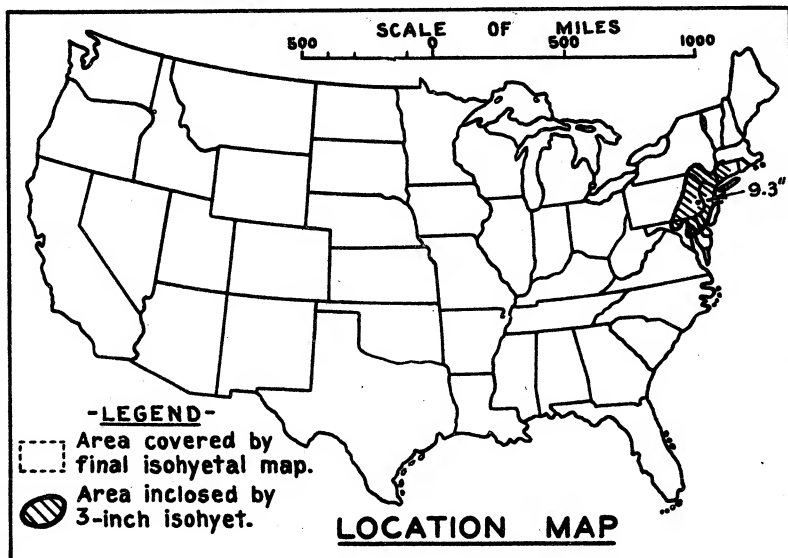
STORM STUDIES - ISOHYETAL MAP

Storm of July 24, 1933 Assignment SA 1-11
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 18-20, 1894

Assignment SA 1-13

Location Pa.-Conn.

Study Prepared by:

Middle Atlantic Division
Baltimore District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 12-16-40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7-15-44

Remarks: Centers at

Smiths Corners, Pa. and

Charlotteburg, N.J.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	26
Form 5001-D (" " " ")-----	0
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	25

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

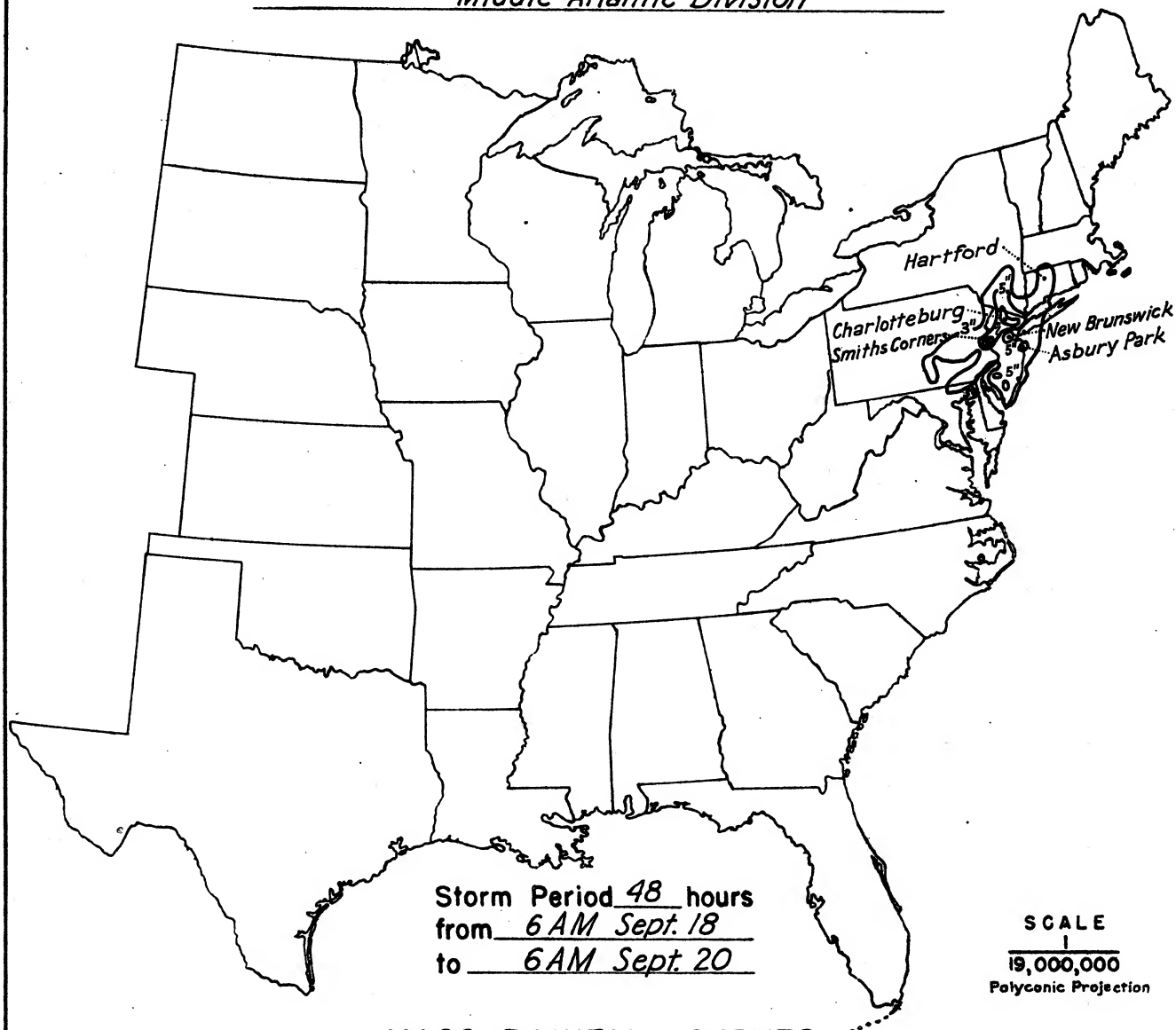
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

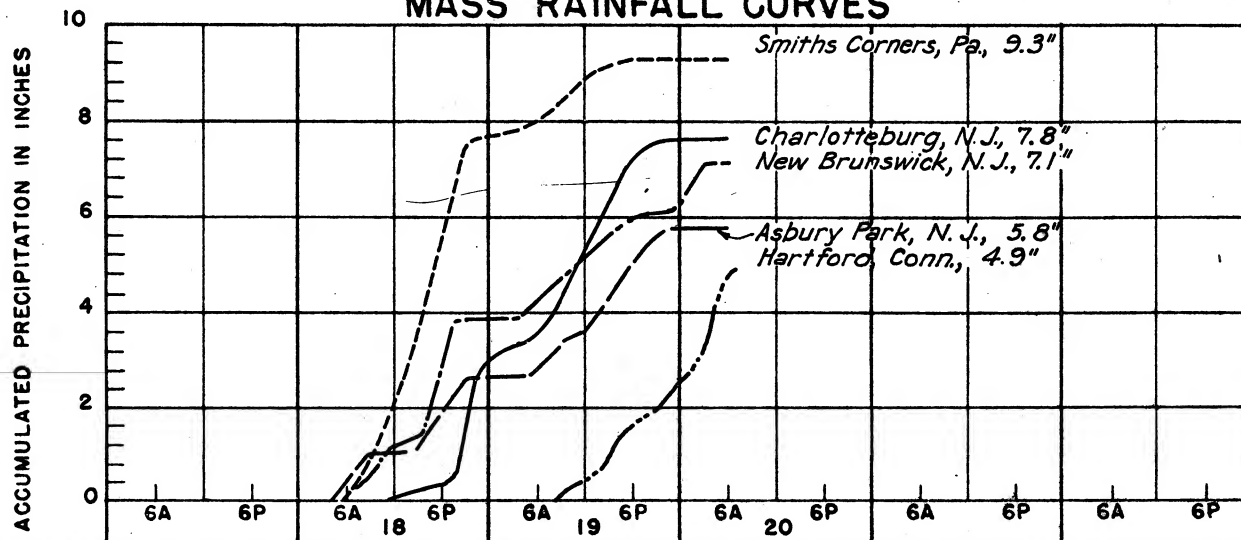
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	3.2	5.5	7.5	7.8	8.4	8.8	9.2					
50	3.0	5.1	6.8	7.2	7.8	8.1	8.5					
100	2.8	4.9	6.4	6.9	7.5	7.7	8.1					
200	2.7	4.6	5.9	6.6	7.1	7.3	7.7					
500	2.4	4.3	5.2	6.1	6.5	6.7	7.2					
1,000	2.2	4.0	4.7	5.5	5.9	6.3	6.8					
2,000	2.0	3.6	4.2	4.9	5.4	5.8	6.3					
5,000	1.7	3.0	3.5	4.1	4.5	5.1	5.6					
10,000	1.5	2.6	3.0	3.4	3.9	4.4	4.9					
20,000	1.2	2.1	2.5	2.8	3.3	3.7	4.2					
40,000	0.9	1.6	1.9	2.2	2.6	2.9	3.4					

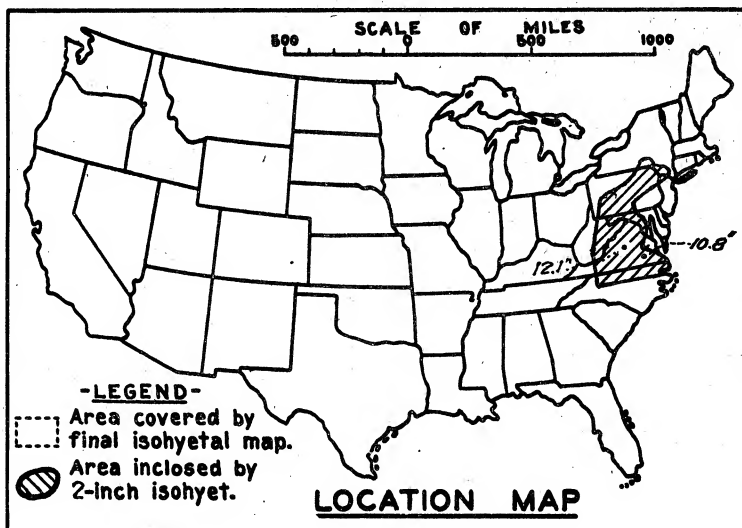
STORM STUDIES - ISOHYETAL MAP

Storm of September 18-20, 1894 Assignment SA 1-13
Study Prepared by: Baltimore, Md. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 27 July-1 August 1923

Assignment S A 1 - 15

Location N. Y. to N. Car.

Study Prepared by:

Middle Atlantic Division

Baltimore District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 4/27/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/27/46Remarks: Centers at
Orange, Va. and
Williamsburg, Va.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1: 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 25
 Form 5001-B (24-hour " ")----- 78
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 80

PART II

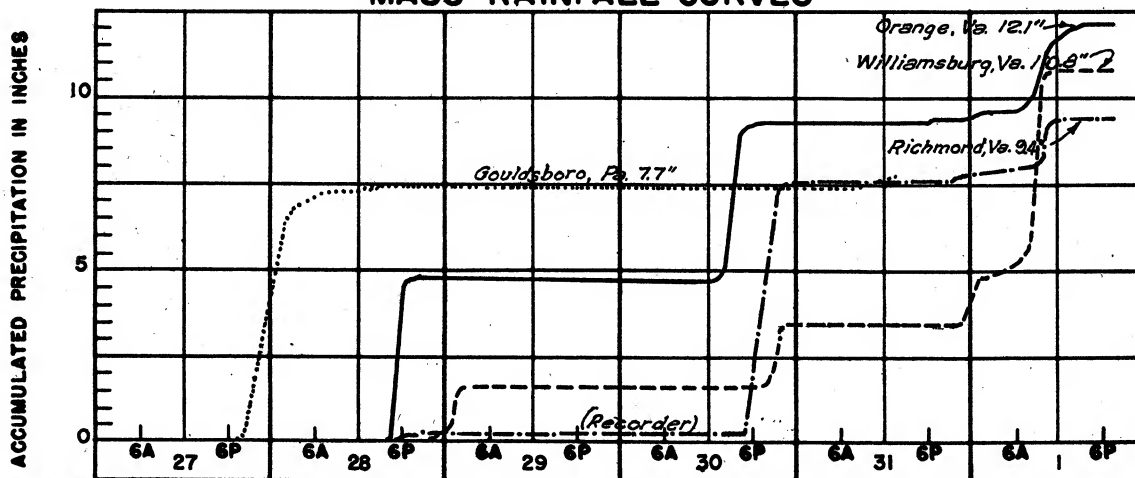
Final isohyetal maps, in 1 sheet, scale 1: 1,000,000

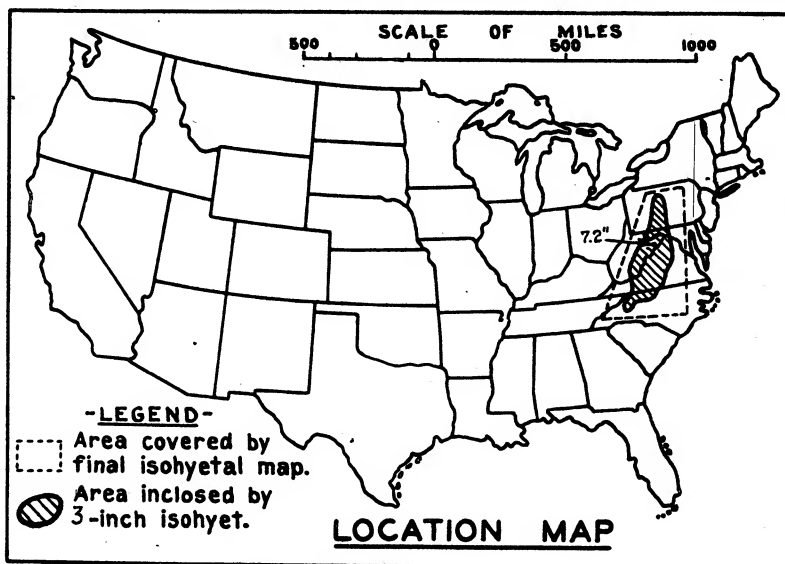
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 8
 Form S-11 (Depth-area data from isohyetal map)----- 3
 Form S-12 (Maximum depth-duration data)----- 11
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	24	36	48	60	72	84	96	108	126
10	7.2	7.2	7.3	7.7	9.1	9.2	9.2	9.6	12.1	12.1	12.1
100	5.2	6.6	6.8	6.9	8.6	8.7	8.7	9.1	10.8	10.9	10.9
200	4.6	6.3	6.5	6.6	8.4	8.5	8.5	8.8	10.3	10.4	10.4
500	3.9	5.8	6.0	6.1	8.0	8.1	8.1	8.3	9.6	9.7	9.7
1,000	3.4	5.3	5.4	5.7	7.5	7.6	7.6	7.7	9.0	9.1	9.1
2,000	3.0	4.7	4.8	5.2	6.8	6.9	6.9	7.0	8.2	8.4	8.4
5,000	2.3	3.4	4.0	4.3	5.0	5.1	5.1	5.3	6.5	6.7	6.7
10,000	1.9	2.3	3.3	3.6	3.8	3.9	3.9	4.3	5.3	5.5	5.5
20,000	1.4	1.6	2.5	2.7	2.8	2.9	2.9	3.6	4.3	4.5	4.5
50,000	0.8	1.1	1.2	1.6	1.8	2.1	2.3	2.8	3.2	3.4	3.8
80,000	0.5	0.8	1.0	1.4	1.6	1.8	2.2	2.5	2.7	3.0	3.5

STORM STUDIES - ISOHYETAL MAPStorm of July 27-August 1, 1923 Assignment SA 1-15Study Prepared by: Baltimore, Md. District
Middle Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 27 - 30, 1896
 Assignment SA 1 - 19
 Location Md. Va. W.Va. Pa.
 Study Prepared by:

Middle Atlantic Division
 Washington District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/19/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/9/43

Remarks: Center at
 Bloomery, W.Va.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	5
Form 5001-B (24-hour " ")-----	25
Form 5001-D (" " " ")-----	0
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	24

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

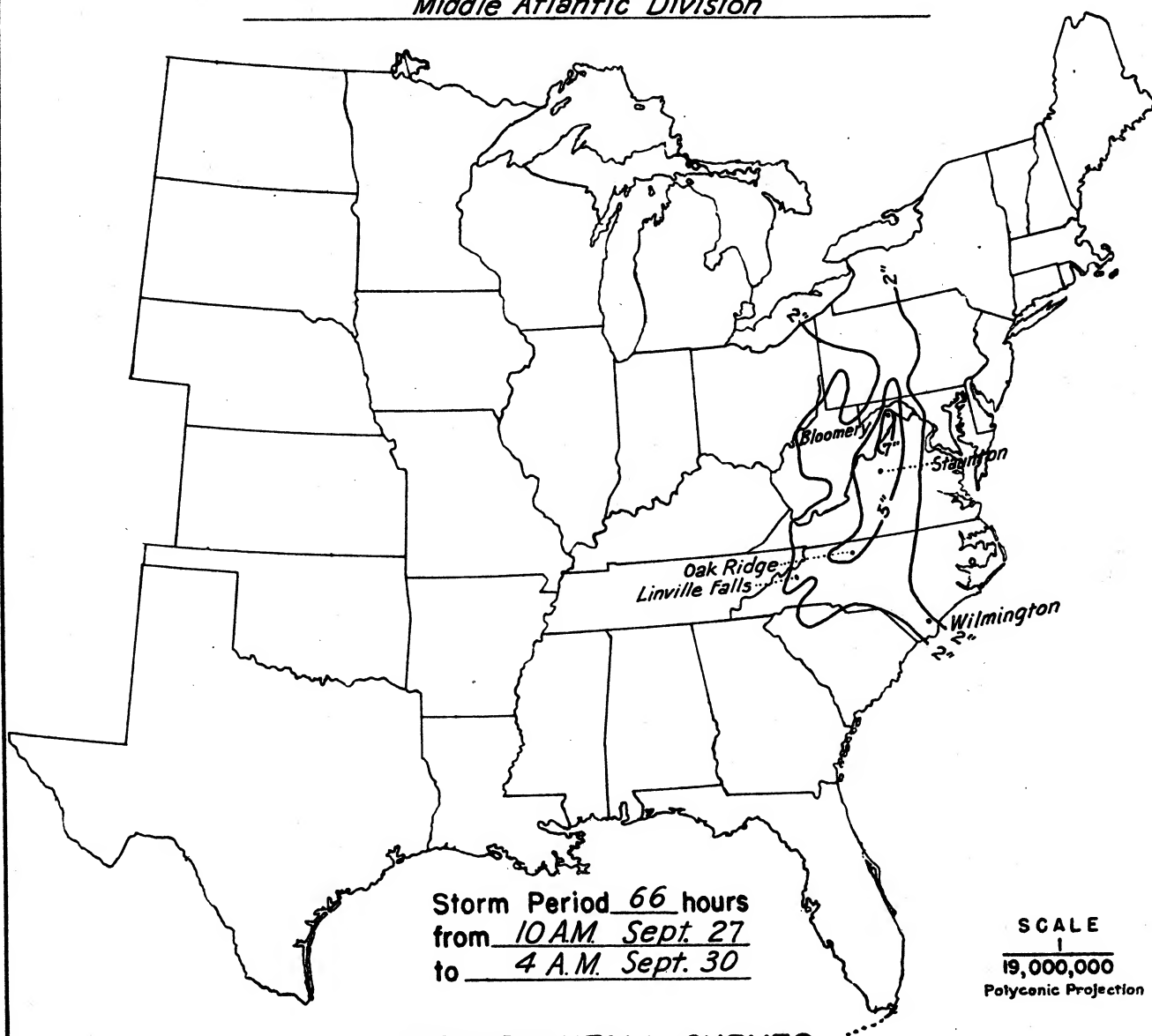
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

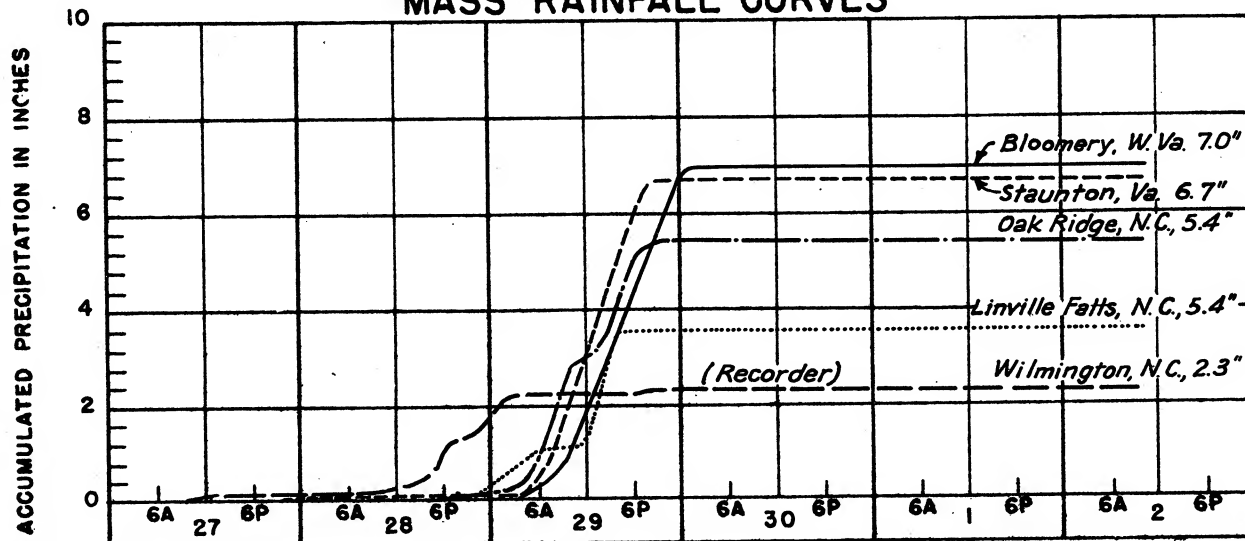
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	66					
10	4.1	5.9	6.9	7.2	7.2	7.2					
100	4.0	5.7	6.8	7.1	7.1	7.1					
200	3.9	5.6	6.8	7.0	7.0	7.0					
500	3.8	5.4	6.7	6.9	6.9	6.9					
1,000	3.7	5.3	6.6	6.8	6.9	6.9					
2,000	3.6	5.1	6.4	6.6	6.7	6.7					
5,000	3.3	4.8	6.0	6.2	6.3	6.3					
10,000	2.9	4.4	5.5	5.8	5.9	5.9					
20,000	2.4	3.7	4.7	5.0	5.2	5.2					
50,000	1.6	2.7	3.4	3.8	3.9	3.9					

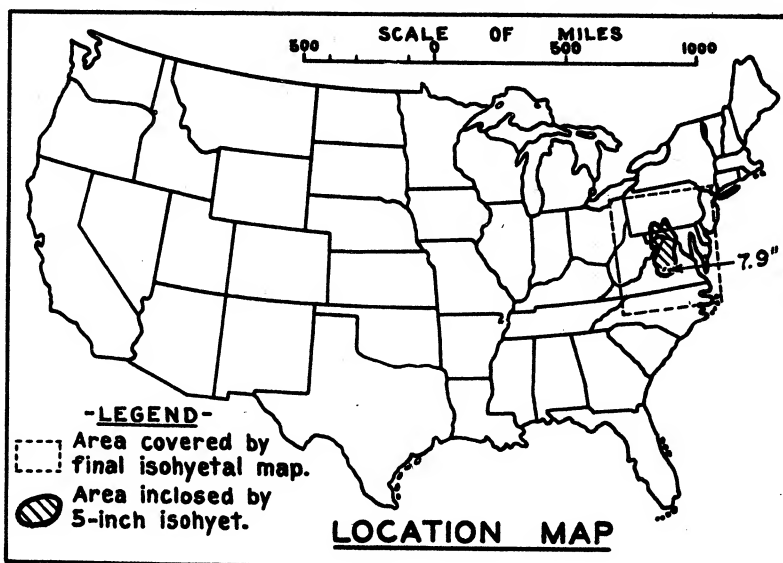
STORM STUDIES - ISOHYETAL MAP

Storm of September 27-30, 1896 Assignment SA 1-19
 Study Prepared by: Washington, D. C. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 7-12, 1924

Assignment SA 1-24

Location Va.-W. Va.-Md.

Study Prepared by:

Middle Atlantic Division

Washington District Office

Part I Reviewed by H. M. Sec. of

Weather Bureau, 12/15/39

Part II Approved by Office, Chief

of Engineers for Distribution

of Factual Data, 12/3/43

Remarks: Centers at

Charlottesville, Va. and

Burlington, W. Va.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	23
Form 5001-B (24-hour " ")-----	87
Form 5001-D (" " " ")-----	0
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	53

PART II

Final isohyetal maps, in 1 sheet, scale 1:2,500,000

Data and computation sheets:

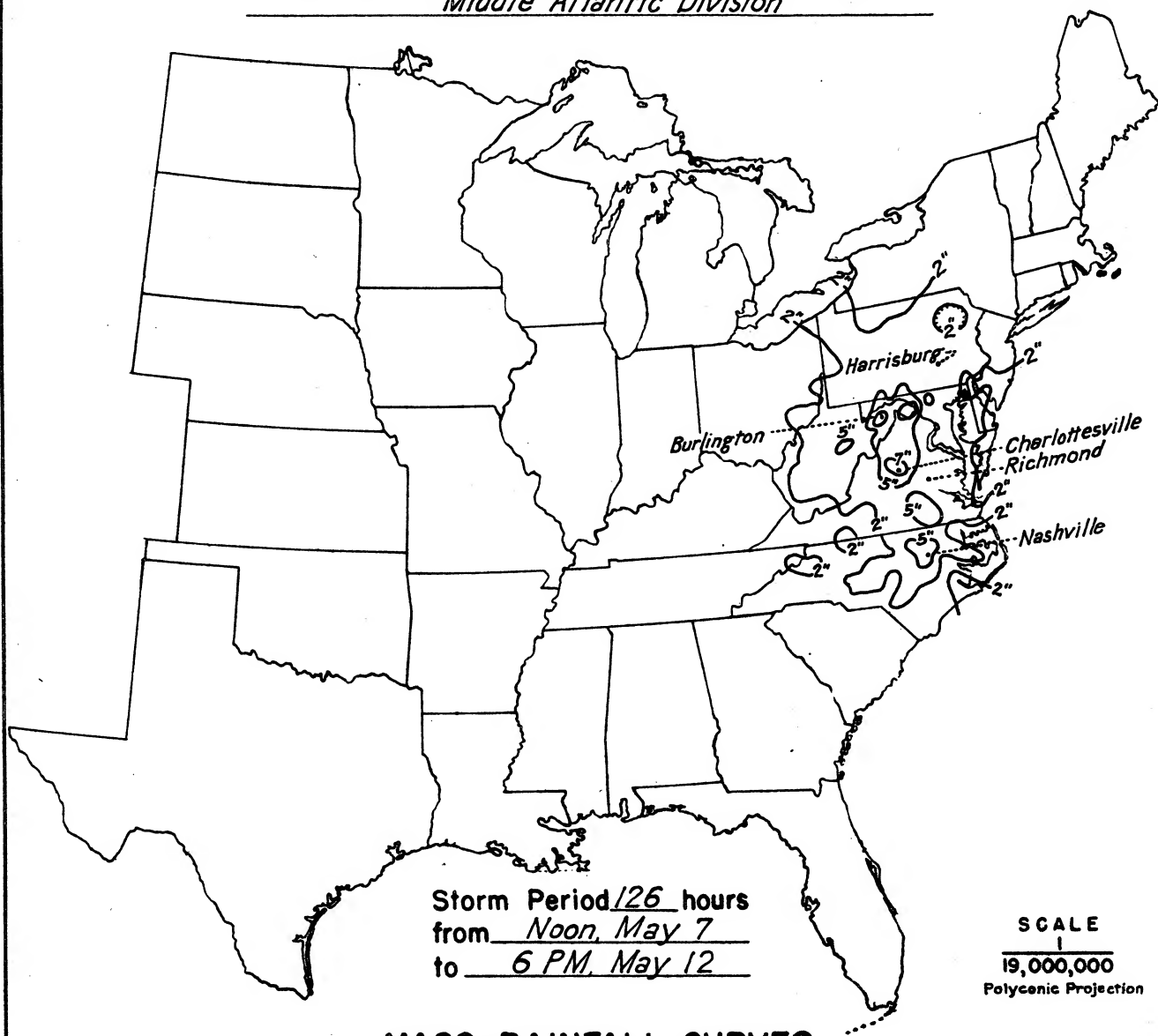
Form S-10 (Data from mass rainfall curves)-----	10
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

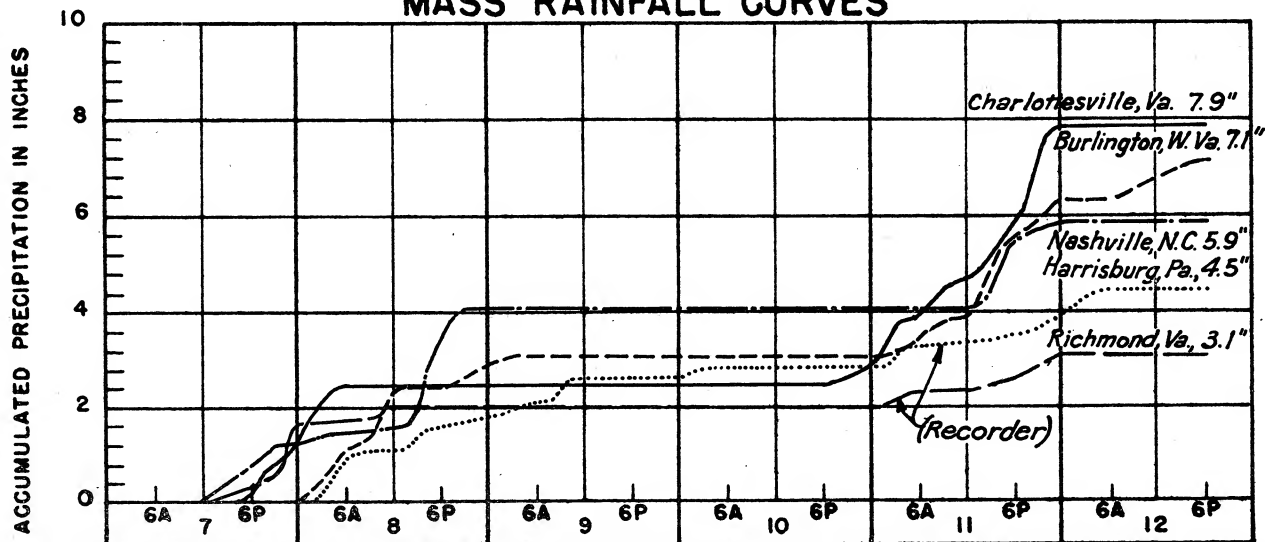
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	90	96	126
10	2.1	3.2	4.1	4.9	5.3	5.4	5.4	5.4	5.9	6.8	7.9
100	2.1	3.1	3.9	4.9	5.2	5.3	5.3	5.3	5.8	6.8	7.8
200	2.0	3.1	3.8	4.8	5.1	5.2	5.2	5.2	5.8	6.8	7.7
500	1.8	2.9	3.6	4.5	4.9	5.0	5.0	5.0	5.6	6.6	7.6
1,000	1.7	2.8	3.4	4.2	4.6	4.7	4.8	4.8	5.3	6.5	7.3
2,000	1.6	2.6	3.2	3.9	4.3	4.3	4.5	4.5	5.1	6.2	7.1
5,000	1.4	2.3	2.8	3.4	3.6	3.8	4.0	4.0	4.6	5.6	6.5
10,000	1.2	2.1	2.6	3.0	3.3	3.4	3.6	3.6	4.2	5.1	6.1
20,000	1.1	1.8	2.2	2.6	2.8	2.9	3.1	3.1	3.8	4.5	5.4
50,000	.8	1.5	1.8	2.1	2.2	2.3	2.4	2.4	3.2	3.6	4.4
63,350	.8	1.4	1.7	1.9	2.0	2.1	2.3	2.3	3.0	3.4	4.2

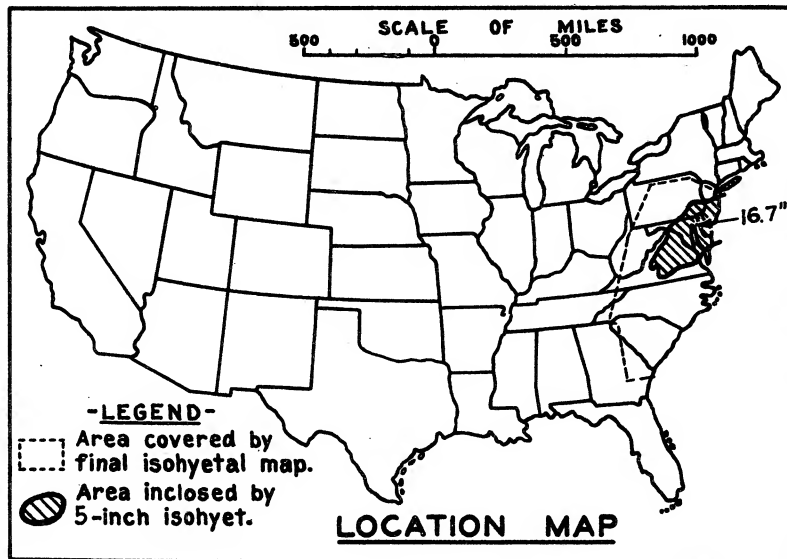
STORM STUDIES - ISOHYETAL MAP

Storm of May 7-12, 1924 Assignment SA 1-24
Study Prepared by: Washington, D. C., District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 2-6, 1935

Assignment SA1-26

Location Va.-Md.-Del.

Study Prepared by:

Middle Atlantic Division

Washington District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12/18/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 8/27/43

Remarks: Center at

Easton, Md.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	44
Form 5001-B (24-hour " ")-----	256
Form 5001-D (" " " ")-----	0
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	78

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

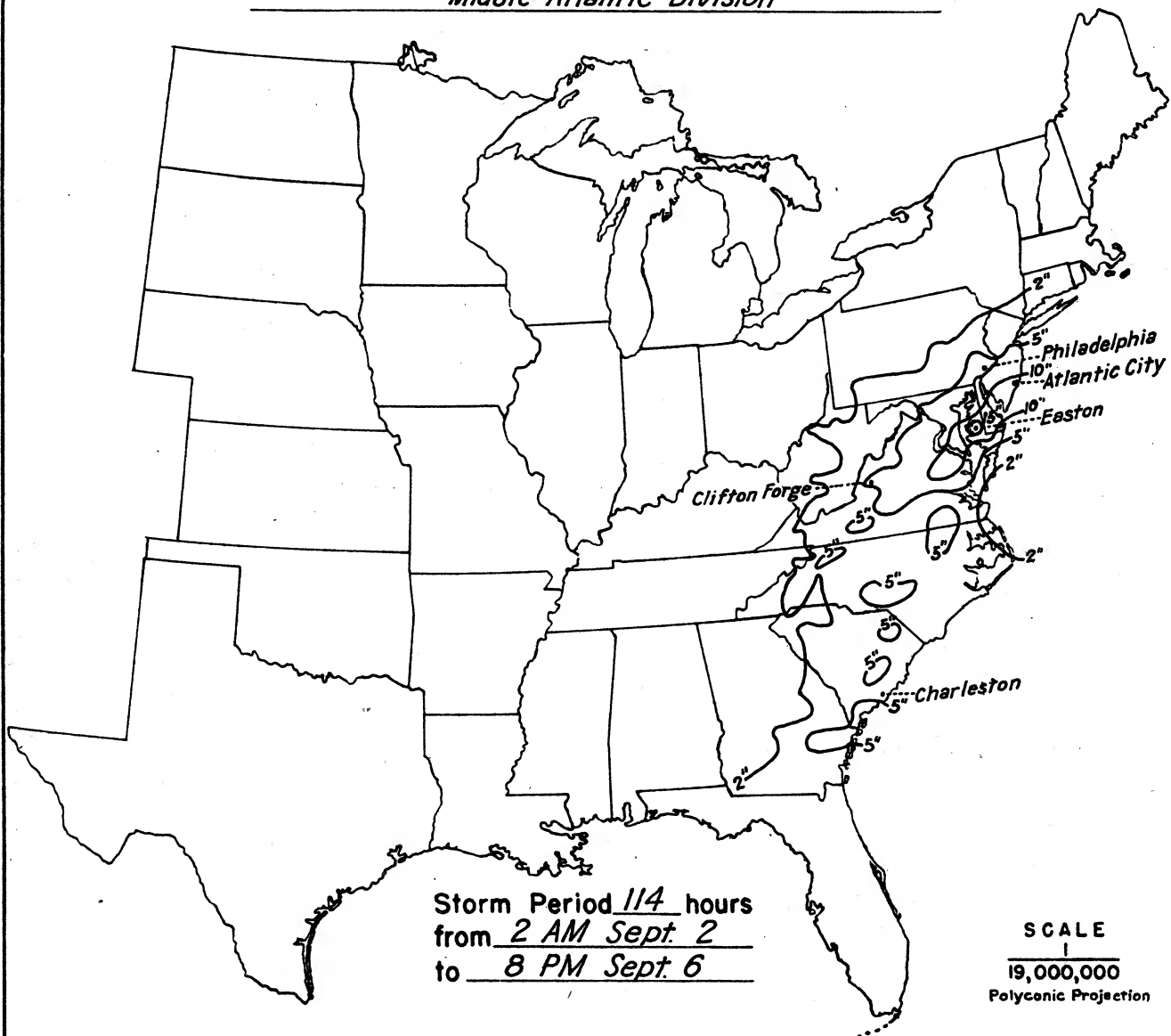
Form S-10 (Data from mass rainfall curves)-----	13
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

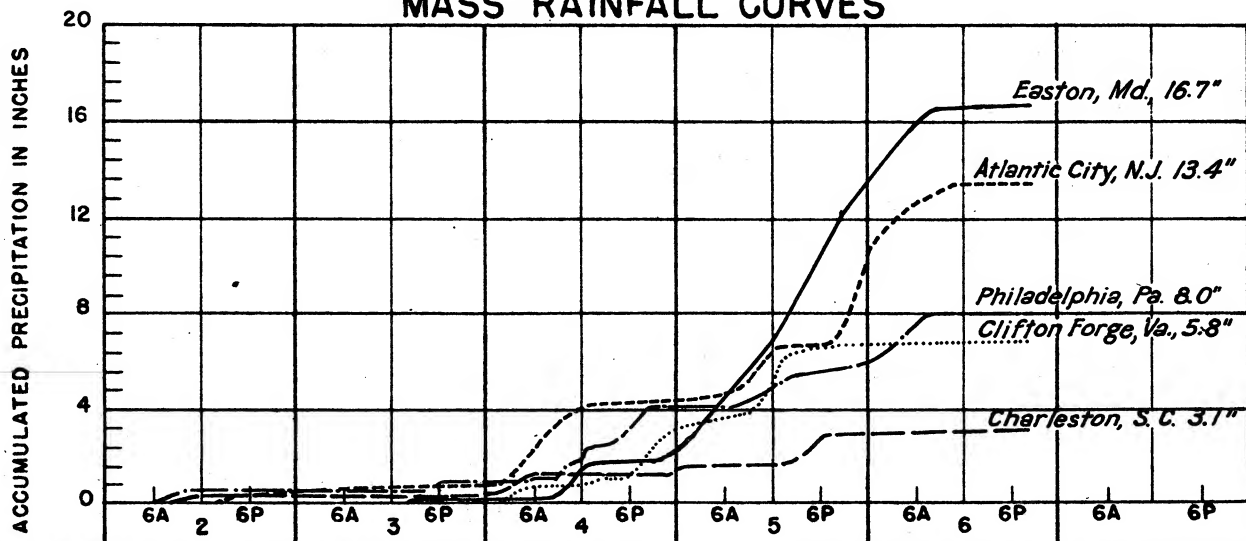
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	6.0	9.7	10.5	12.6	13.5	14.6	16.3	16.6	16.7	16.7	16.7
100	4.5	7.4	9.4	11.4	13.2	14.3	15.8	16.3	16.4	16.4	16.4
200	4.2	6.9	9.1	11.3	13.1	14.1	15.4	16.0	16.1	16.1	16.1
500	4.1	6.4	8.8	11.1	12.8	13.6	14.8	15.3	15.4	15.4	15.5
1,000	3.8	6.3	8.7	10.8	12.4	13.0	14.1	14.5	14.7	14.7	14.8
2,000	3.7	6.2	8.6	10.5	11.8	12.4	13.3	13.8	13.9	13.9	14.1
5,000	3.3	5.8	8.0	9.8	10.6	11.3	12.2	12.6	12.7	12.8	12.8
10,000	3.0	5.2	7.3	8.8	9.5	10.2	11.1	11.5	11.6	11.7	11.7
20,000	2.4	4.3	5.9	7.2	7.9	8.5	9.4	9.8	9.9	10.0	10.1
48,469	1.0	2.0	2.9	3.7	4.4	4.8	6.3	6.6	6.8	7.1	7.2

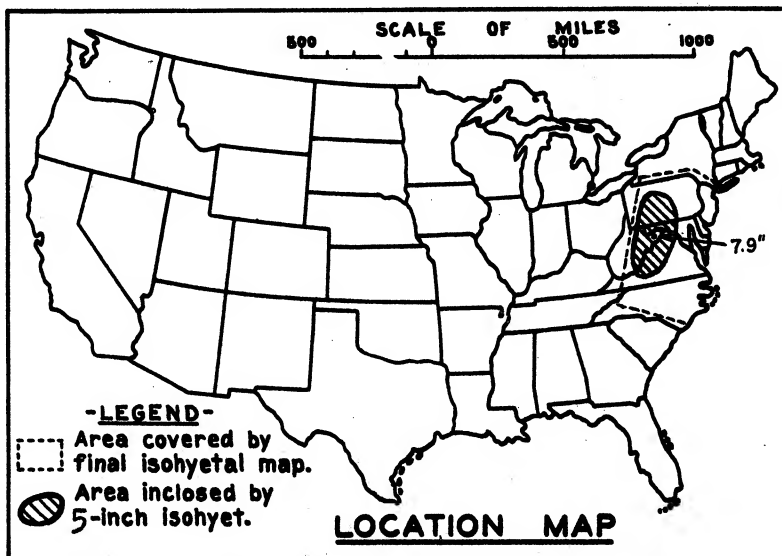
STORM STUDIES - ISOHYETAL MAP

Storm of September 2-6, 1935 Assignment SA 1-26
Study Prepared by: Washington, D. C. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of March 16 - 21, 1936
 Assignment SA 1 - 27
 Location Va., W.Va., Pa. & Md.
 Study Prepared by:
 Middle Atlantic Division
 Washington District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12/5/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 8/27/43

Remarks: Center at
 Romney, W.Va.

Portion of Part I prepared by
 Pittsburgh District Office

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	22	18
Form 5001-B (24-hour " ")-----	35	52
Form 5001-D (" " " ")-----	0	0
Misc. precip. records, meteorological data, etc.-----	0	0
Form 5002 (Mass rainfall curves)-----	42	43

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

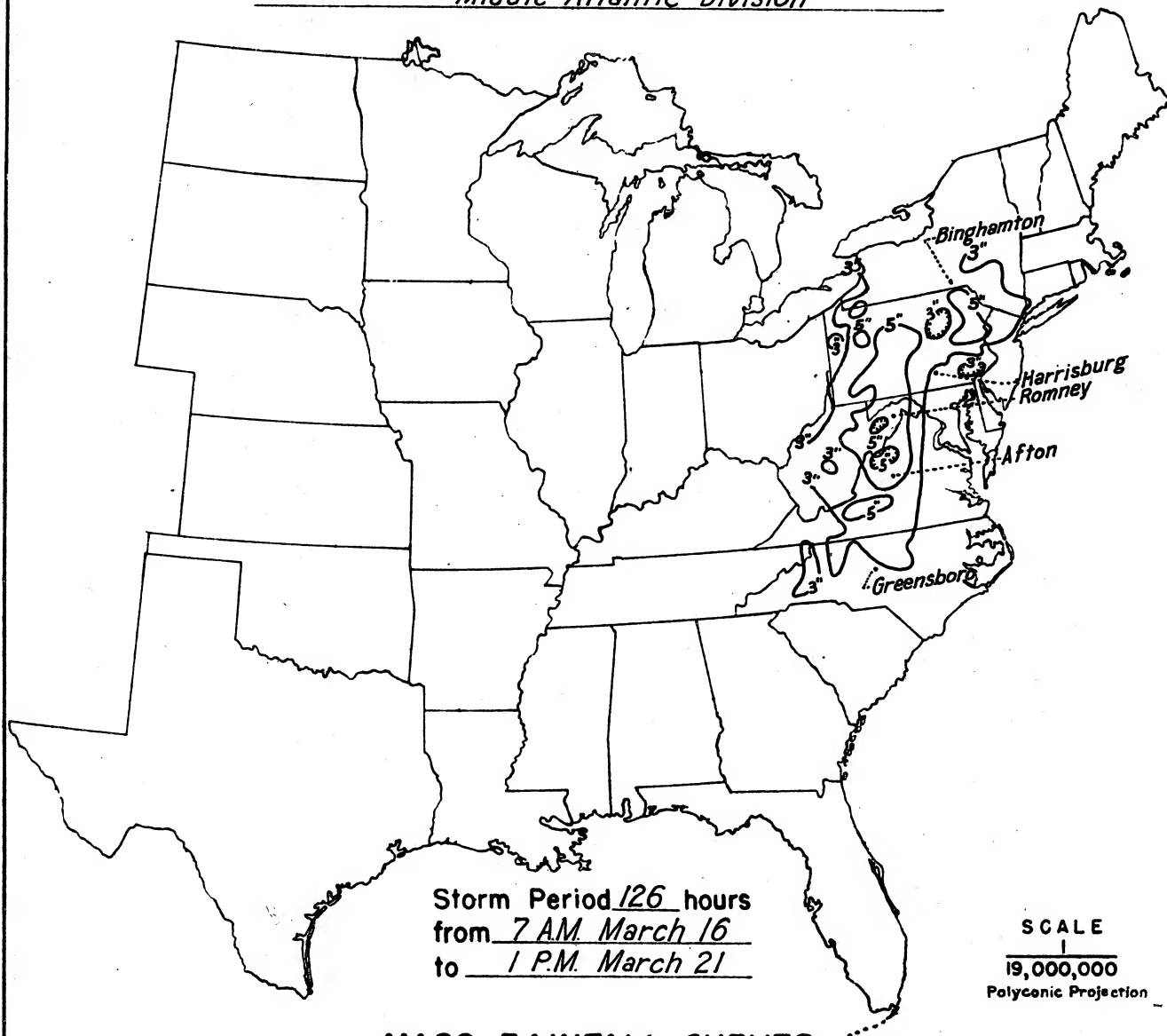
Form S-10 (Data from mass rainfall curves)-----	10
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

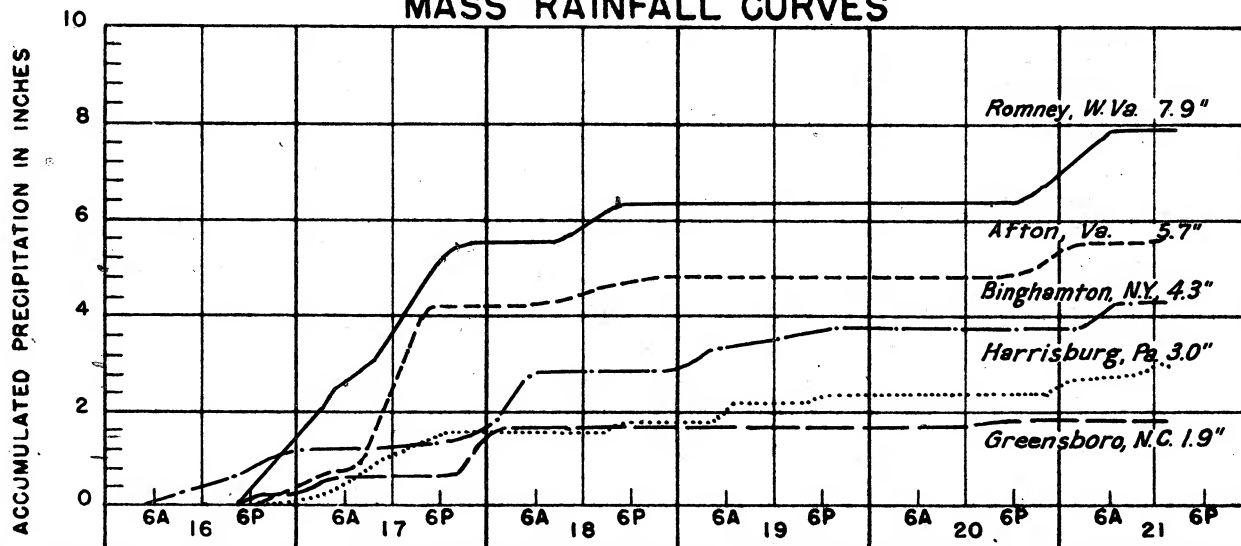
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	2.7	4.2	5.0	5.6	6.1	6.4	6.8	7.0	7.2	7.3	7.9
100	2.2	3.7	4.6	5.1	5.8	6.3	6.5	6.8	7.1	7.3	7.6
200	2.1	3.5	4.4	4.9	5.7	6.3	6.5	6.8	7.1	7.3	7.6
500	1.9	3.3	4.2	4.7	5.5	6.1	6.3	6.7	6.9	7.0	7.4
1,000	1.8	3.1	4.1	4.6	5.4	5.8	6.1	6.4	6.6	6.8	7.2
2,000	1.7	2.9	3.9	4.4	5.1	5.5	5.8	6.1	6.3	6.5	6.9
5,000	1.5	2.6	3.6	4.1	4.7	4.9	5.3	5.7	5.9	6.1	6.6
10,000	1.3	2.4	3.4	3.8	4.3	4.5	4.8	5.3	5.5	5.7	6.3
20,000	1.2	2.2	3.1	3.4	3.9	4.1	4.4	4.8	5.1	5.3	5.9
50,000	0.9	1.8	2.6	2.9	3.2	3.4	3.7	4.0	4.3	4.4	5.2
85,700	0.8	1.6	2.2	2.6	2.8	3.0	3.3	3.5	3.7	3.8	4.6

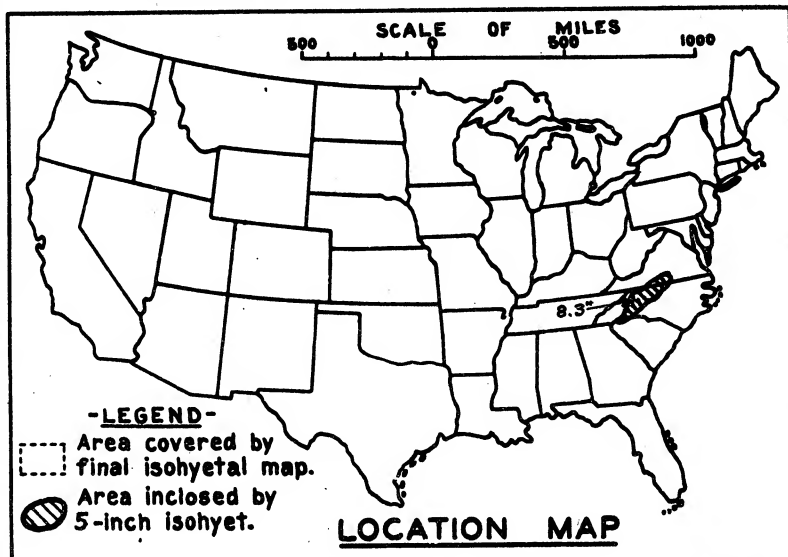
STORM STUDIES - ISOHYETAL MAP

Storm of March 16-21, 1936 Assignment SA 1-27
Study Prepared by: Washington, D. C. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 21-23, 1898

Assignment S A 2 - 3

Location Western No. Carolina

Study Prepared by:

South Atlantic Division

Charleston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/27/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/7/45

Remarks: Centers at :

Patterson and Ashbers, N.C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	6
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	8

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

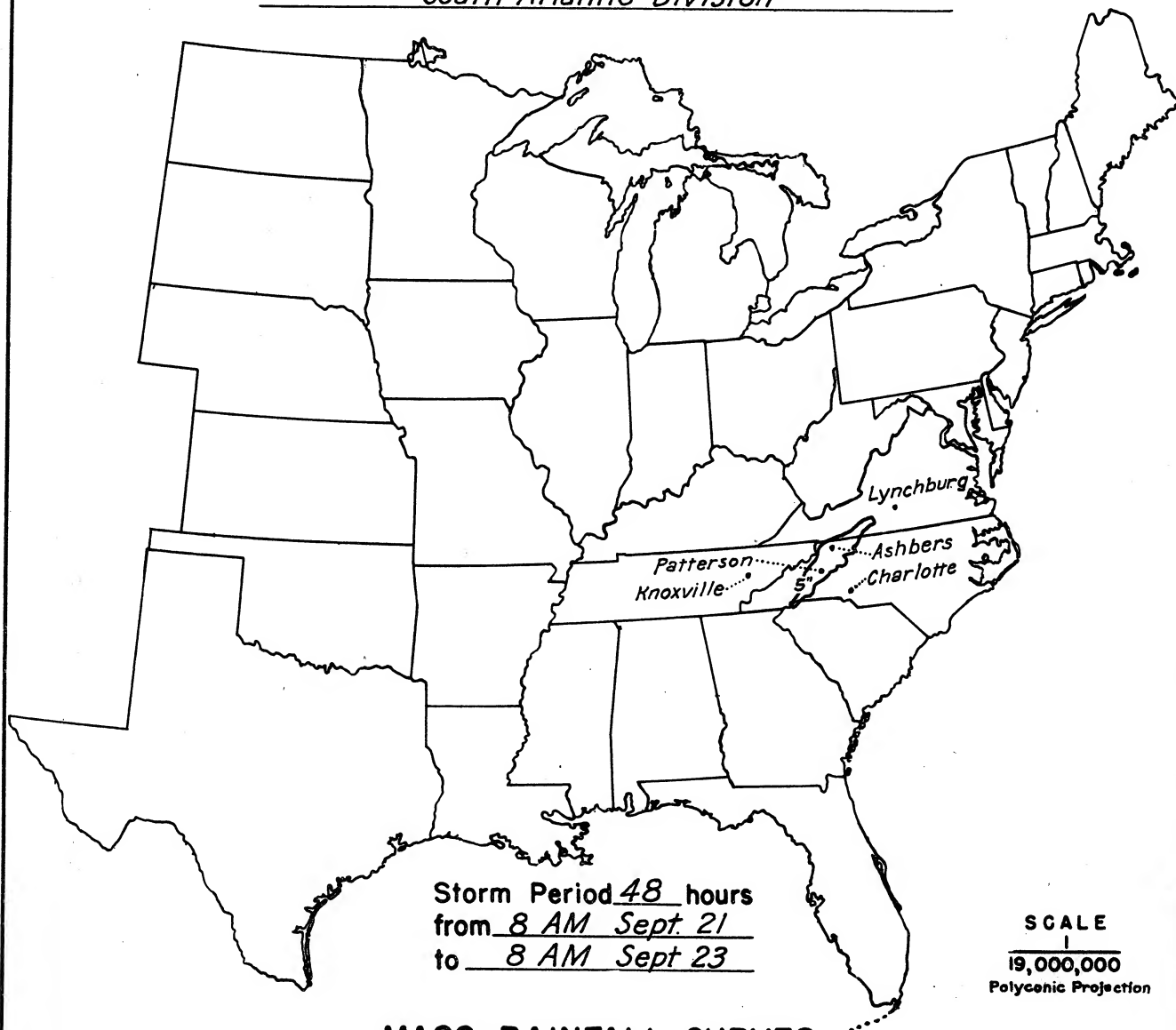
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

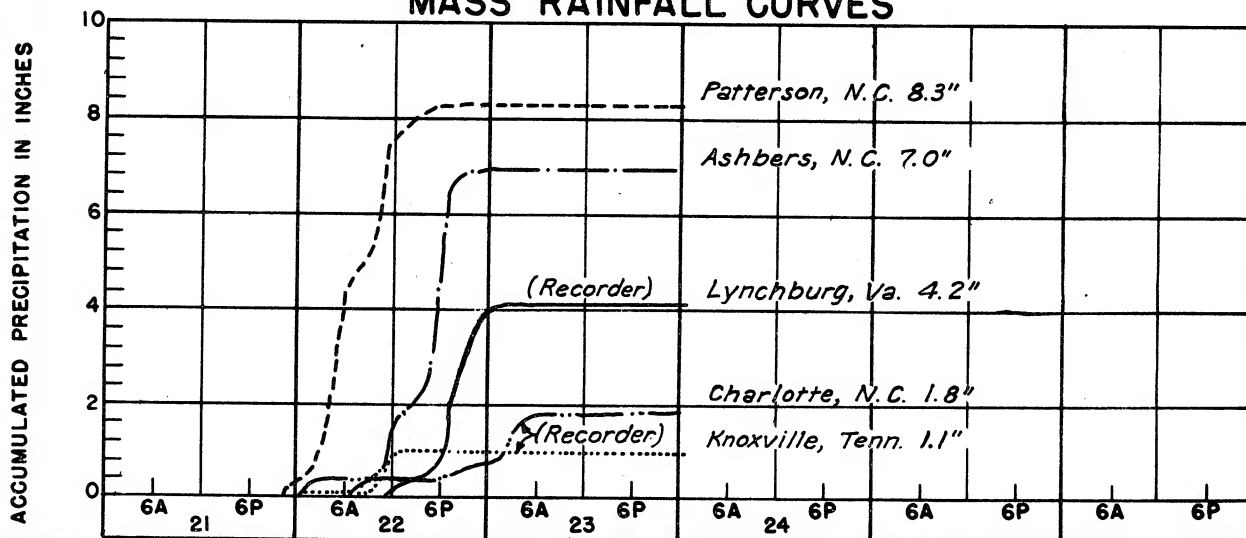
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	4.9	7.3	8.1	8.3	8.3	8.3	8.3					
100	4.9	6.9	8.0	8.1	8.1	8.1	8.1					
200	4.9	6.8	7.9	8.0	8.0	8.0	8.0					
500	4.7	6.4	7.5	7.8	7.8	7.8	7.8					
1,000	4.4	5.9	7.0	7.6	7.6	7.6	7.6					
2,000	3.9	5.2	6.3	7.0	7.1	7.1	7.1					
5,000	3.1	4.1	5.1	5.9	6.1	6.2	6.2					
10,000	2.3	3.2	4.2	4.7	5.2	5.3	5.3					
16,200	1.3	2.3	3.4	3.9	4.4	4.5	4.5					

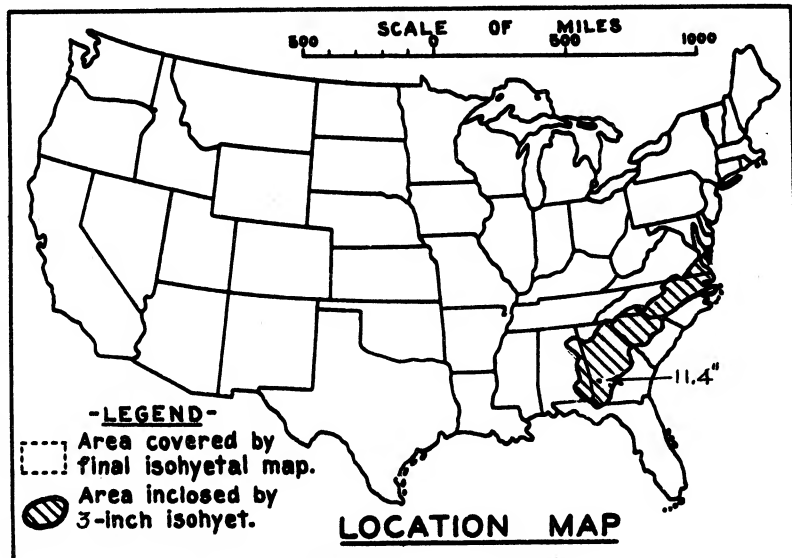
STORM STUDIES - ISOHYETAL MAP

Storm of September 21-23, 1898 Assignment SA 2-3
Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 16-19, 1901
 Assignment S A 2 - 5
 Location Va., N.C., S.C., Ga. & Ala.
 Study Prepared by:

South Atlantic Division
 Charleston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12-28-44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9-4-45

Remarks: Center at:

Americus, Ga.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	15
Form 5001-B (24-hour " ")-----	—
Form 5001-D (" " " ")-----	11
Misc. precip. records, meteorological data, etc.-----	—
Form 5002 (Mass rainfall curves)-----	24

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

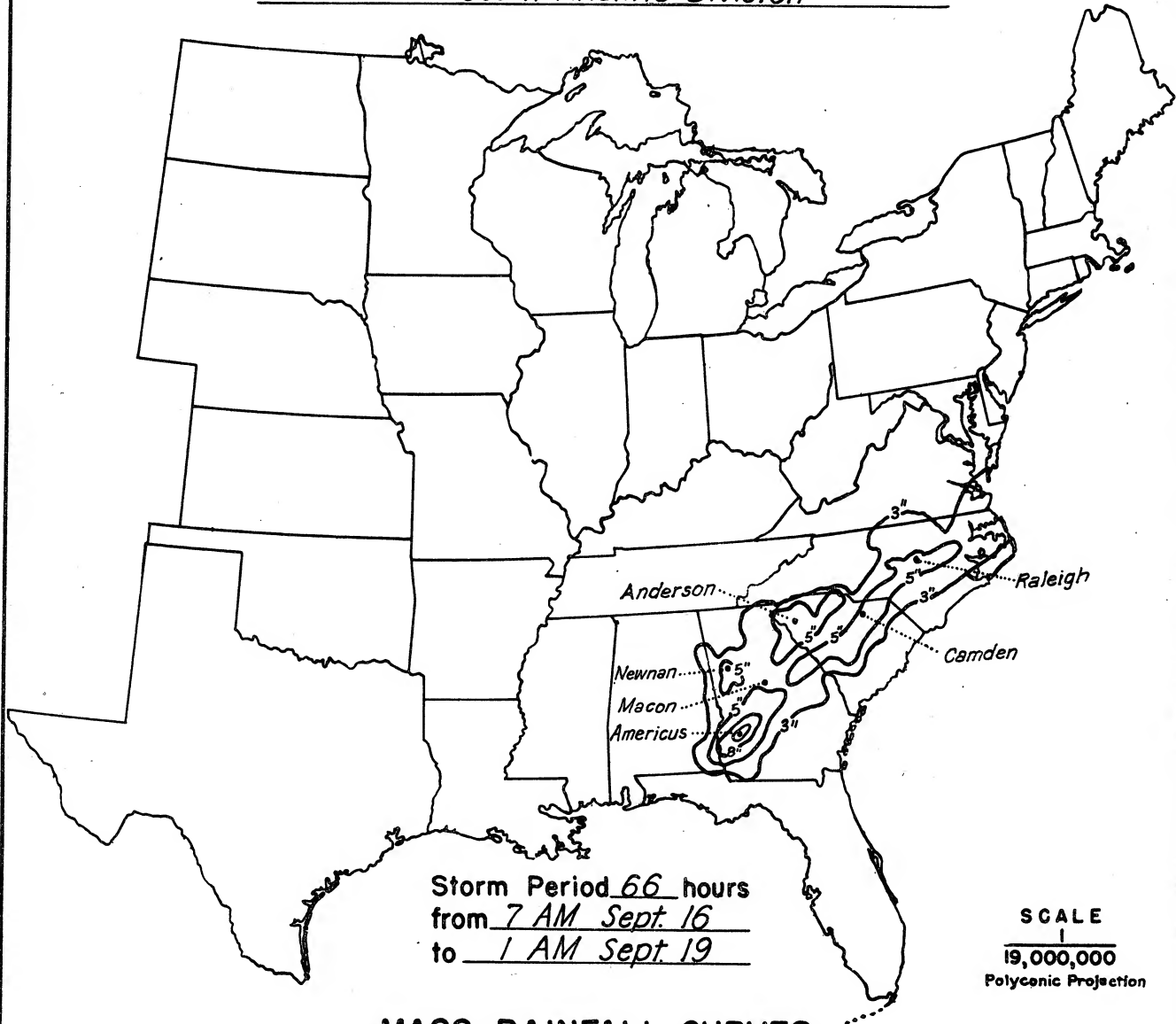
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	12
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

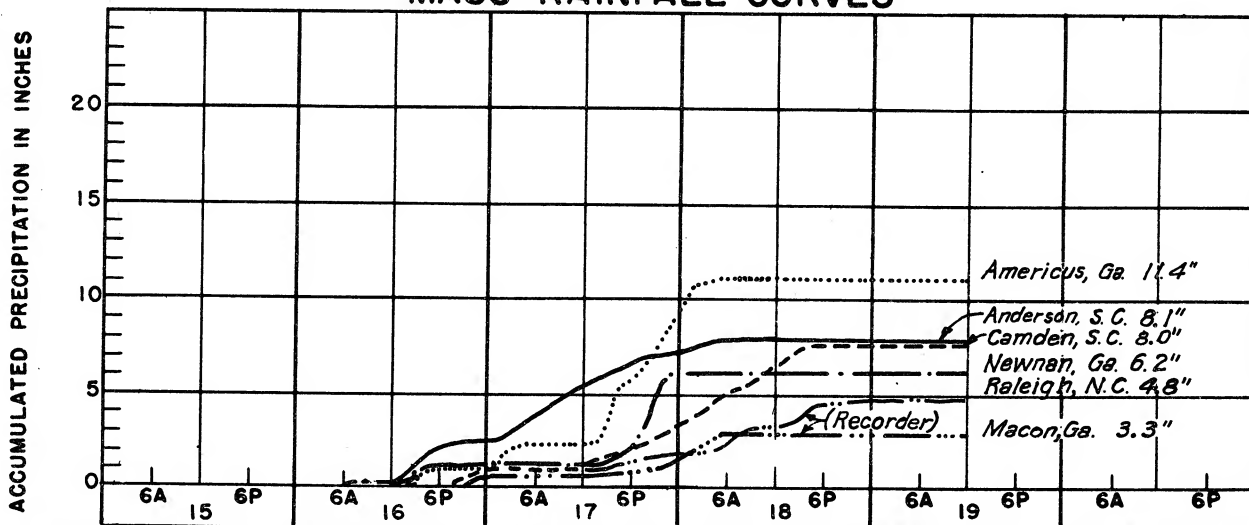
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	66	72	96	120
10	5.3	8.6	8.8	8.8	9.8	11.2	11.4	11.4			
100	5.0	8.3	8.6	8.6	9.4	10.7	11.2	11.2			
200	4.9	8.2	8.6	8.6	9.3	10.5	11.0	11.0			
500	4.7	7.9	8.5	8.5	9.1	10.1	10.6	10.6			
1,000	4.4	7.7	8.2	8.4	8.9	9.5	10.2	10.2			
2,000	4.1	7.1	7.7	8.1	8.4	8.8	9.5	9.5			
5,000	3.4	5.9	6.8	7.2	7.4	7.8	8.4	8.6			
10,000	2.9	4.9	5.8	6.2	6.4	6.9	7.5	7.7			
20,000	2.4	4.0	4.7	5.2	5.4	6.0	6.7	6.8			
50,000	1.6	2.6	3.3	3.8	4.1	4.7	5.4	5.5			
95,000	0.9	1.7	2.3	2.8	3.2	3.5	4.1	4.6			

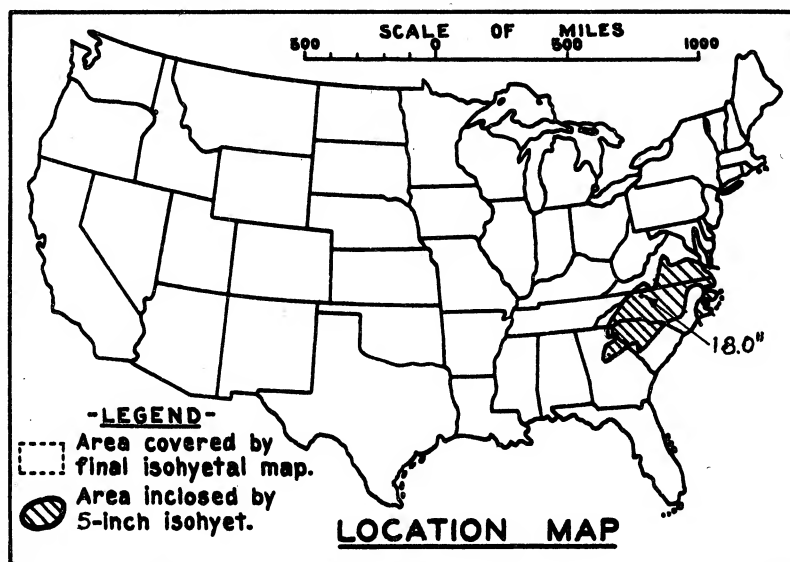
STORM STUDIES - ISOHYETAL MAP

Storm of September 16-19, 1901 Assignment SA 2-5
Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 23-28, 1908
 Assignment S A 2 - 6
 Location Va., N.C., S.C., & Ga.
 Study Prepared by:

South Atlantic Division
 Charleston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/22/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/7/45

Remarks: Centers at:
 Vade Mecum, and Monroe, N. C.
 and Carlton, Ga.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 4 sheets, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	13
Form 5001-B (24-hour " ")-----	24
Form 5001-D (" " " ")-----	—
Misc. precip. records, meteorological data, etc.-----	—
Form 5002 (Mass rainfall curves)-----	24

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

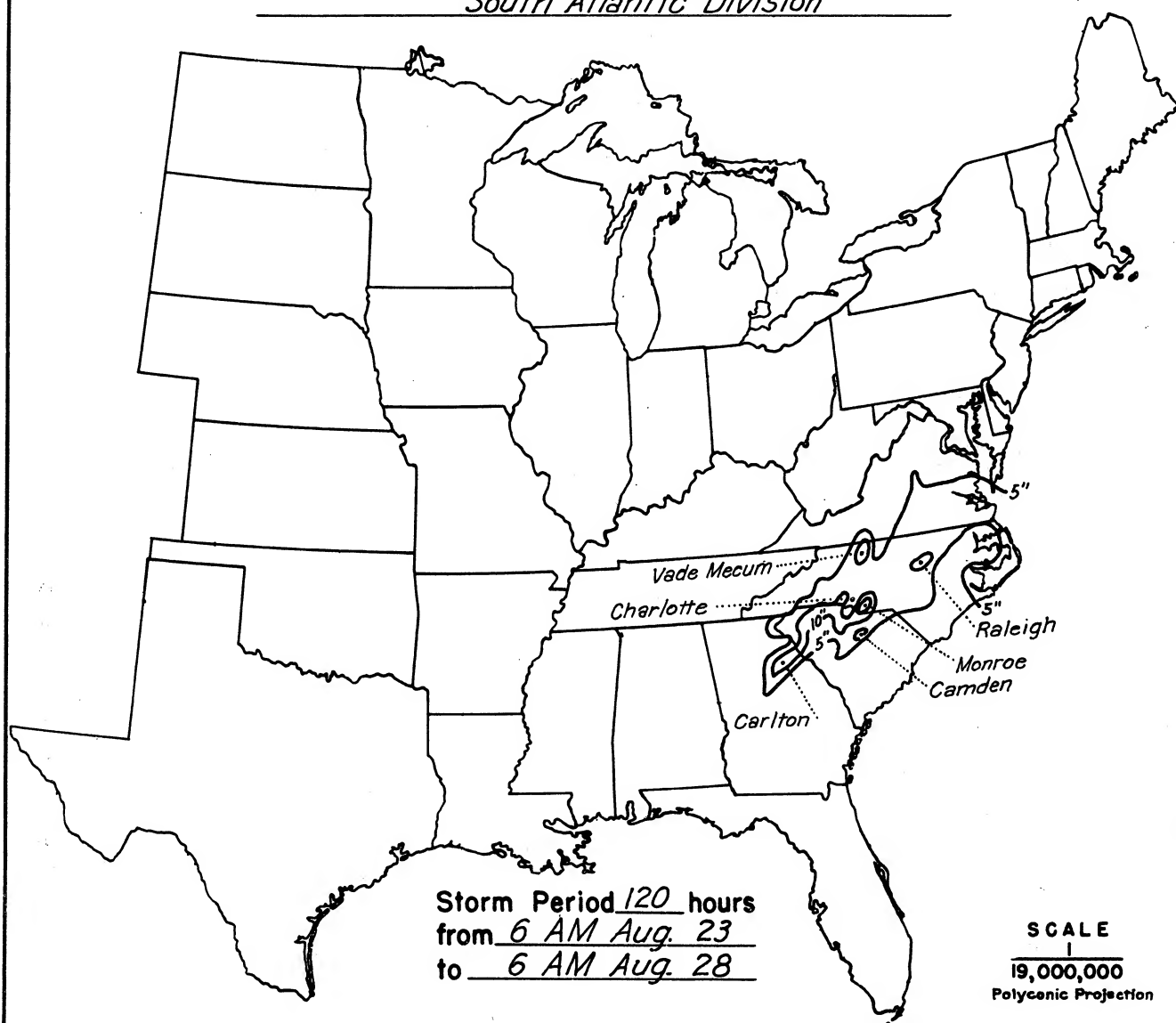
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

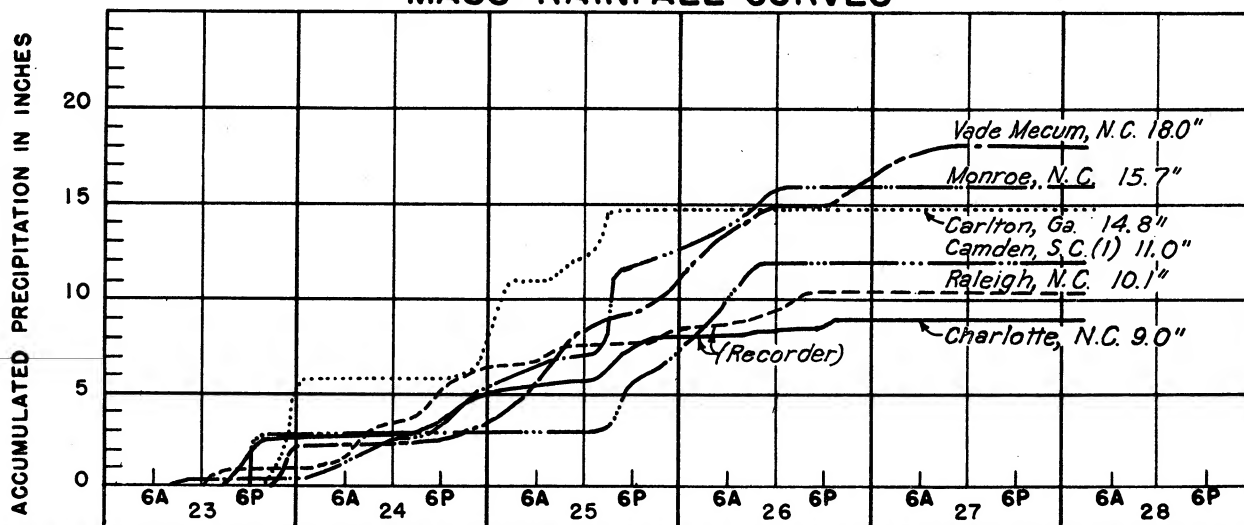
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	8.0	10.2	10.8	11.7	13.0	13.6	14.2	14.9	16.2	18.0	18.0
100	6.4	8.3	9.2	10.8	11.9	12.2	13.8	14.5	15.1	16.6	16.6
200	5.9	7.8	8.7	10.4	11.5	11.8	13.6	14.3	14.8	15.9	15.9
500	5.3	7.0	8.0	9.9	10.9	11.1	13.2	13.9	14.2	15.0	15.0
1,000	4.7	6.3	7.4	9.5	10.4	10.5	12.9	13.5	13.8	14.2	14.2
2,000	4.2	5.6	6.8	8.8	9.7	9.9	12.4	12.9	13.1	13.4	13.4
5,000	3.6	4.7	5.8	7.7	8.5	8.8	11.1	11.8	12.1	12.2	12.2
10,000	3.0	4.0	5.0	6.6	7.4	7.7	9.7	10.6	11.0	11.1	11.2
20,000	2.3	3.2	4.1	5.4	6.1	6.4	8.0	9.0	9.7	9.8	9.9
50,000	1.4	2.1	2.8	3.7	4.3	4.6	5.6	6.6	7.5	7.7	7.8
69,600	1.1	1.7	2.3	3.1	3.5	4.0	4.8	5.7	6.5	6.8	6.9

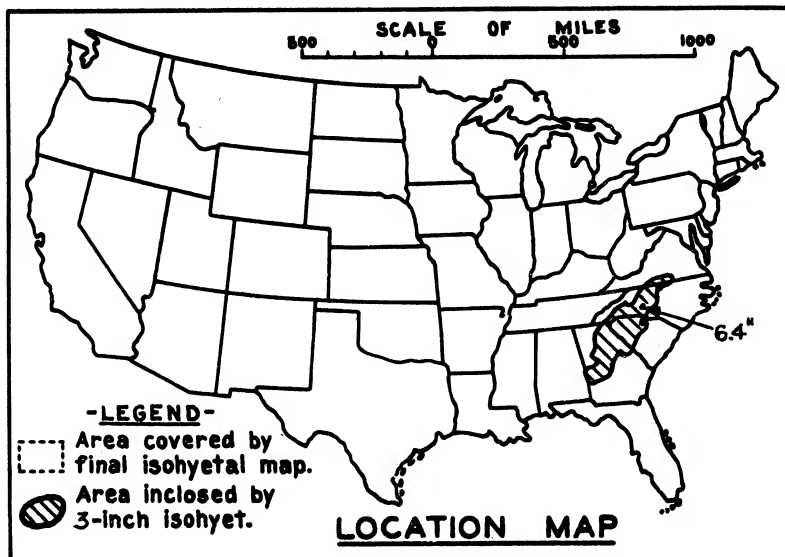
STORM STUDIES - ISOHYETAL MAP

Storm of August 23-28, 1908 Assignment SA 2-6
 Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of March 14-15, 1912
 Assignment S A 2 - 7
 Location N.C., S.C., & Ga.
 Study Prepared by:

South Atlantic Division
 Charleston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2-4-44

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9-4-45

Remarks: Center at:

Mt. Holly, N. C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " ")-----	--
Form 5001-D (" " " ")-----	5
Misc. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	14

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

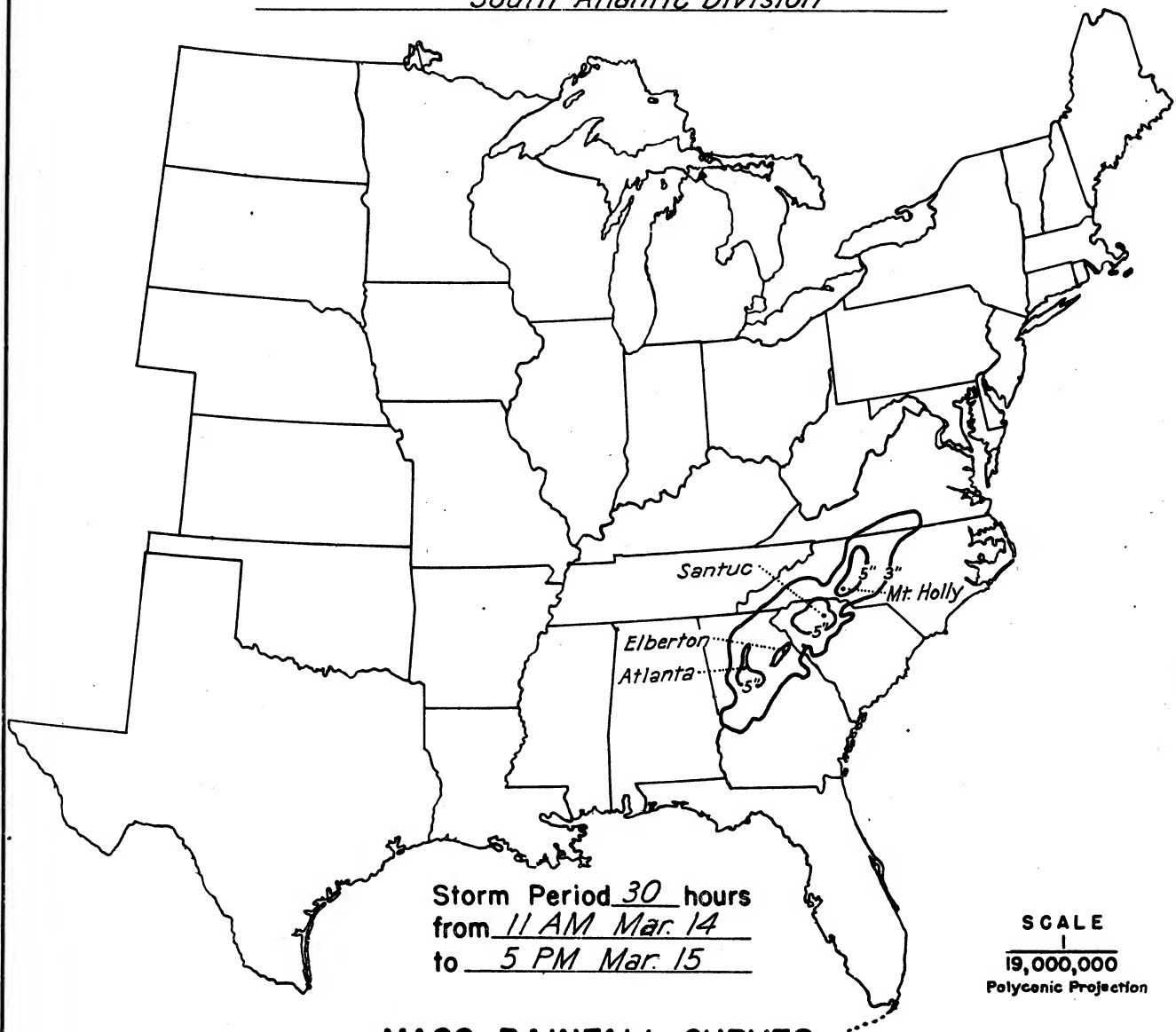
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

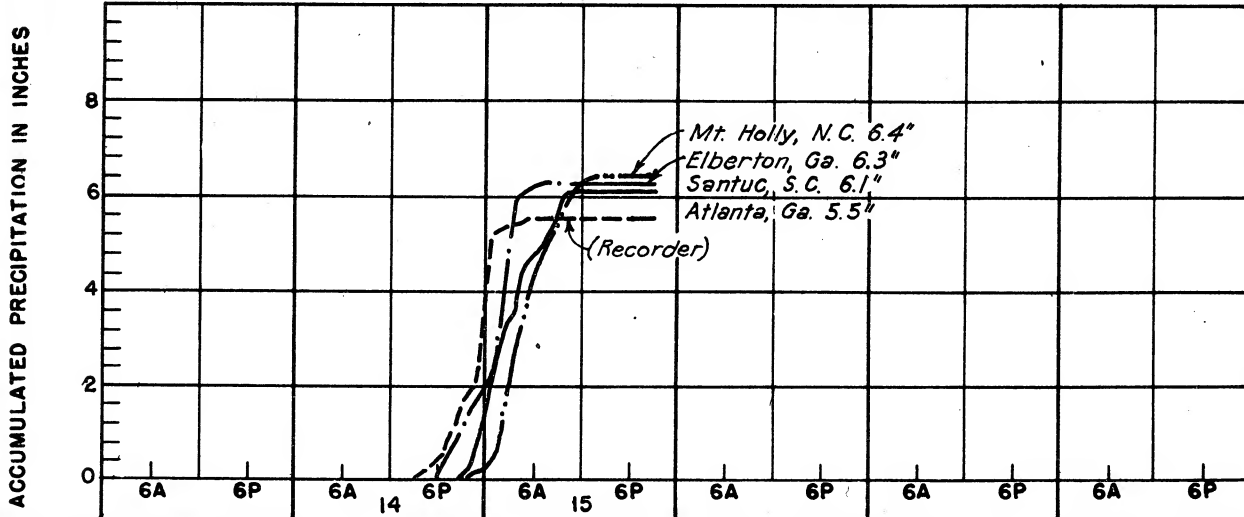
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30					
10	4.5	6.2	6.4	6.4	6.4					
100	4.3	6.1	6.4	6.4	6.4					
200	4.2	6.0	6.3	6.3	6.3					
500	4.0	5.9	6.2	6.2	6.2					
1,000	3.9	5.7	6.1	6.1	6.1					
2,000	3.7	5.3	5.9	5.9	5.9					
5,000	3.3	4.7	5.4	5.4	5.4					
10,000	2.9	4.2	4.9	5.0	5.0					
20,000	2.4	3.7	4.4	4.6	4.6					
32,800	2.0	3.2	4.0	4.2	4.2					

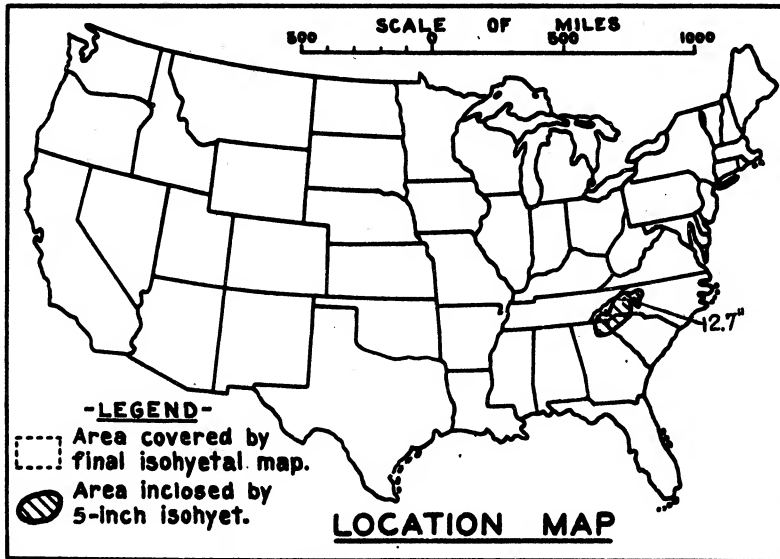
STORM STUDIES - ISOHYETAL MAP

Storm of March 14-15, 1912 Assignment SA 2-7
Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 13-16, 1914
 Assignment S A 2 - 8
 Location North Carolina (Western)
 Study Prepared by:

South Atlantic Division
 Charleston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 3-7-44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9-4-45

Remarks: Centers at:

Mt. Mitchell, Rock House #1,
 and Globe, N. C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " ")-----	--
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	6

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

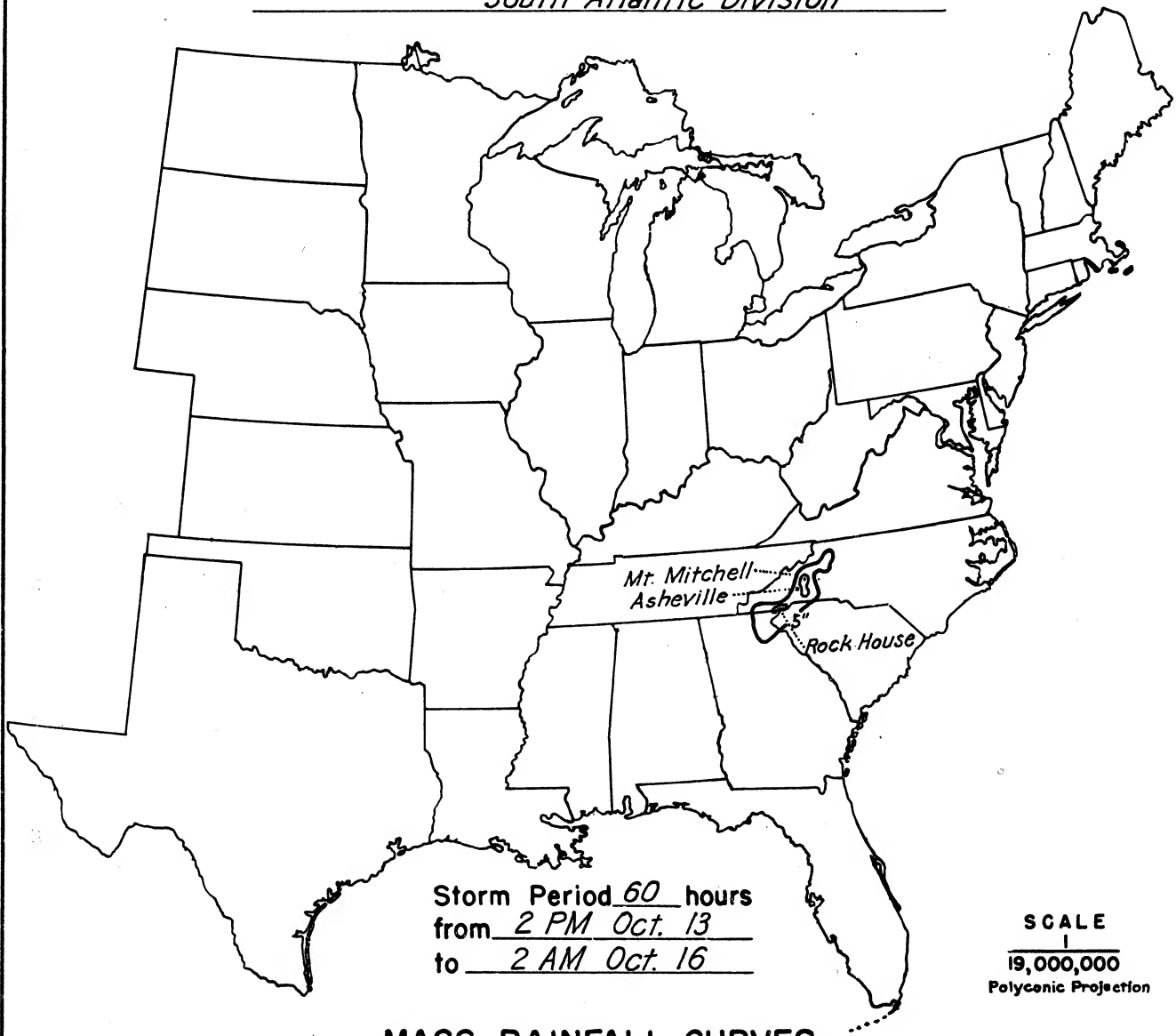
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

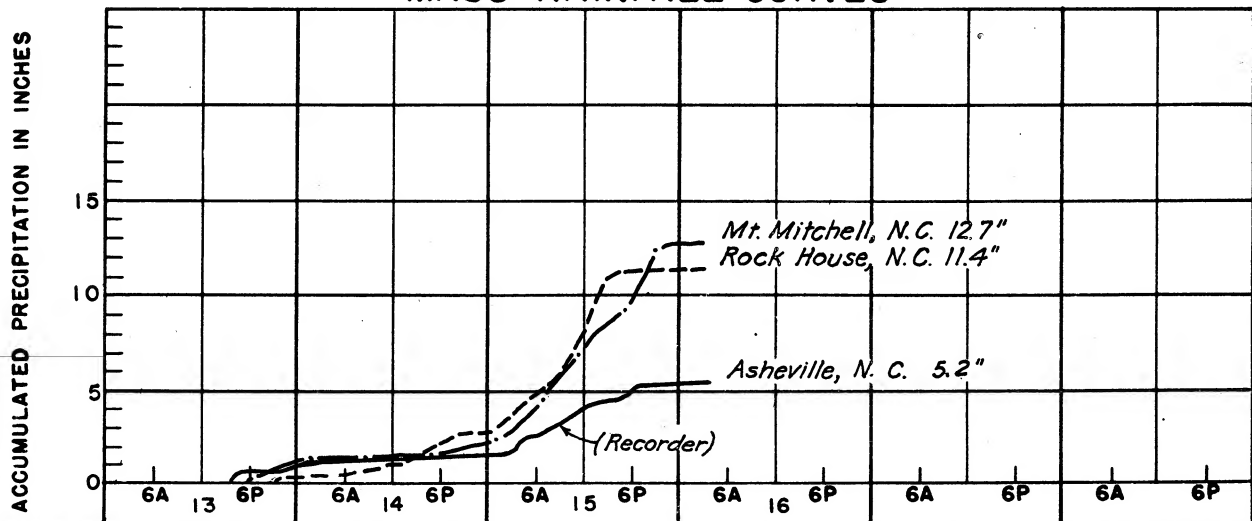
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60			
10	5.8	8.0	9.4	10.7	11.2	11.4	12.1	12.7			
100	5.3	7.4	8.7	9.9	10.3	10.5	11.2	11.8			
200	5.0	7.0	8.3	9.4	9.7	10.1	10.6	11.3			
500	4.4	6.3	7.6	8.6	8.8	9.2	9.7	10.3			
1,000	3.9	5.7	7.0	7.8	8.1	8.5	9.0	9.5			
2,000	3.3	5.0	6.2	6.9	7.3	7.7	8.1	8.5			
5,000	2.5	4.1	5.1	5.6	6.1	6.3	6.6	7.0			
8,300	1.9	3.3	4.2	4.7	5.1	5.3	5.6	6.0			

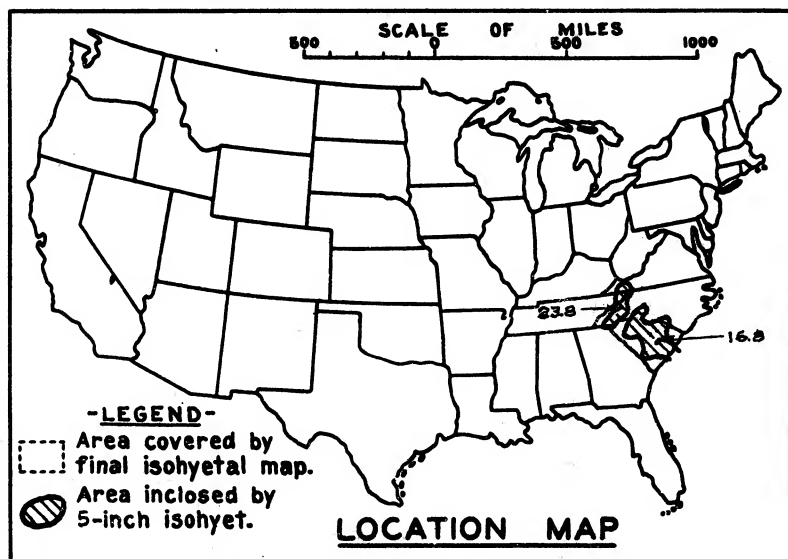
STORM STUDIES - ISOHYETAL MAP

Storm of October 13-16, 1914 Assignment SA 2-8
Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 13 - 17, 1916

Assignment S A 2 - 9

Location N.C. and S.C.

Study Prepared by:

South Atlantic Division

Charleston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/18/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/16/45

Remarks: TOTAL STORM AREA

Centers at; Altapass, N.C.
and Kingtree, S.C.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	10
Form 5001-B (24-hour " ").....	27
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	26

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

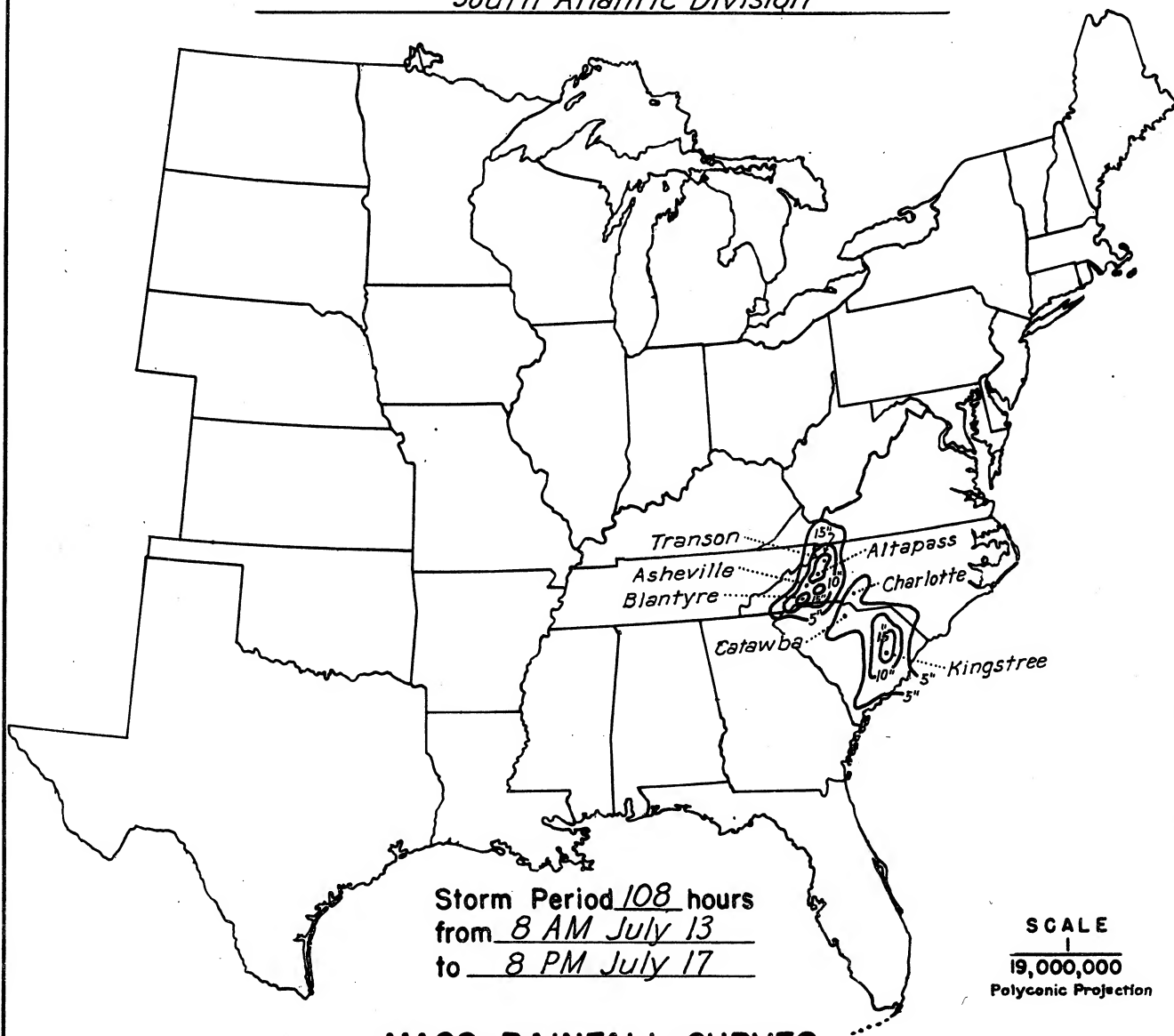
Form S-10 (Data from mass rainfall curves).....	3
Form S-11 (Depth-area data from isohyetal map).....	3
Form S-12 (Maximum depth-duration data).....	12
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

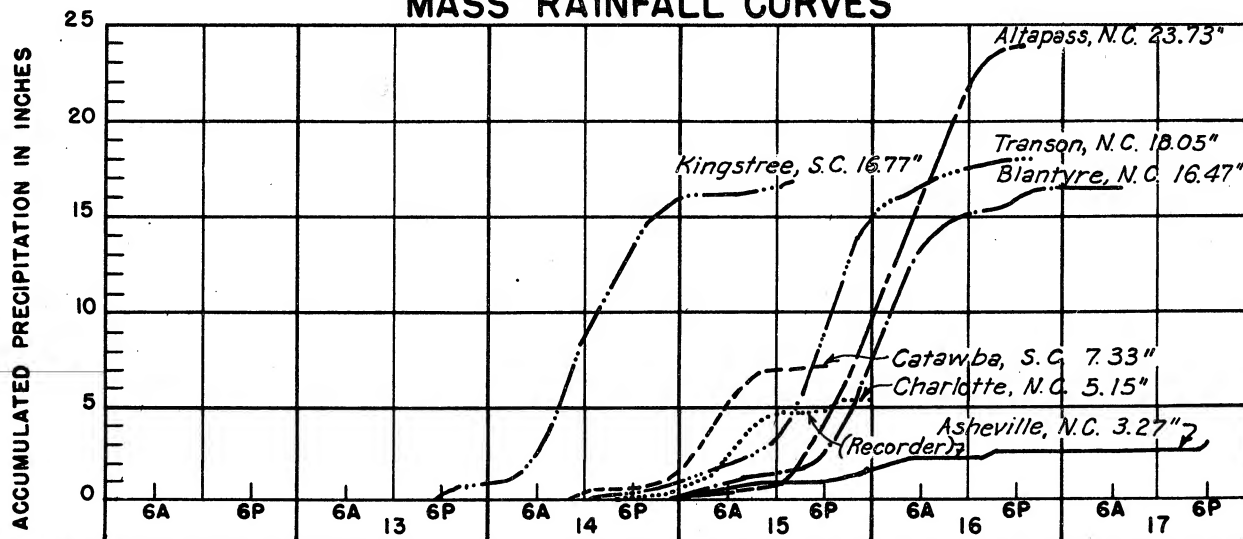
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	8.0	12.6	17.0	22.2	22.9	23.0	23.2	23.7	23.7	23.8	23.8
100	7.2	12.0	15.6	19.3	20.8	21.1	21.7	22.1	22.1	22.2	22.2
200	6.9	11.7	15.0	18.3	19.9	20.3	20.9	21.3	21.4	21.4	21.4
500	6.4	11.1	13.9	16.6	18.3	18.8	19.5	19.8	20.1	20.1	20.1
1,000	5.9	10.4	12.9	15.0	16.7	17.3	18.1	18.4	18.6	18.7	18.7
2,000	5.1	9.3	11.6	13.3	14.9	15.5	16.3	16.6	16.8	16.9	16.9
5,000	3.9	7.4	9.3	10.9	12.0	12.6	13.4	13.6	13.8	14.0	14.0
10,000	3.0	5.5	7.2	8.6	9.4	9.9	10.6	10.8	11.0	11.2	11.2
20,000	2.1	3.8	5.0	5.9	6.6	7.3	8.0	8.2	8.4	8.6	8.6
37,000	1.3	2.2	3.0	3.8	4.7	5.6	7.0	7.5	7.8	8.1	8.1

STORM STUDIES - ISOHYETAL MAP

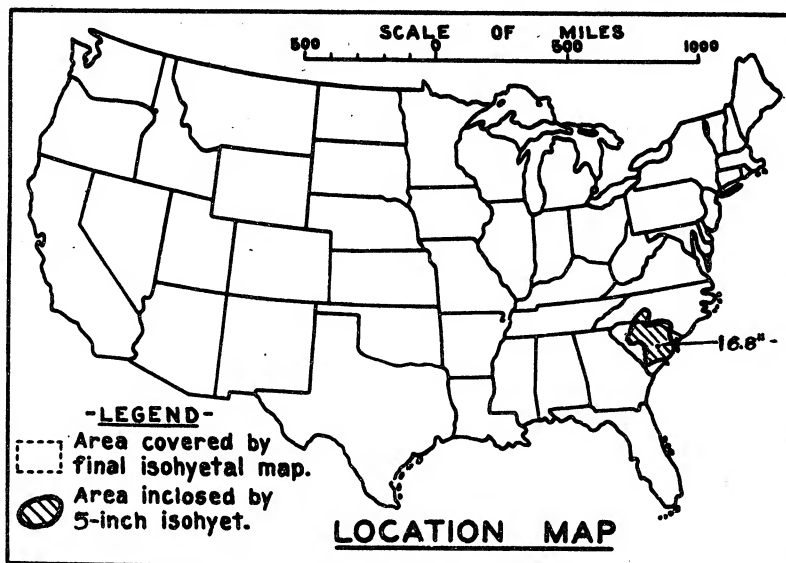
Storm of July 13-17, 1916 Assignment SA 2-9
Study Prepared by: Charleston S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET



Storm of July 13 - 17, 1916

Assignment S A 2 - 9 (a)

Location South Carolina

Study Prepared by:

South Atlantic Division

Charleston District Office

Part I Reviewed by H. M. Sec. of

Weather Bureau, 10/18/39

Part II Approved by Office, Chief

of Engineers for Distribution

of Factual Data, 6/16/45

Remarks: SOUTHEASTERN AREA OF

STORM ONLY Center at:

Kingstree, South Carolina

DATA AND COMPUTATIONS COMPILEDPART I

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 10

Form 5001-B (24-hour " ")----- 27

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 26

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1

Form S-11 (Depth-area data from isohyetal map)----- 2

Form S-12 (Maximum depth-duration data)----- 8

Maximum duration-depth-area curves----- 1

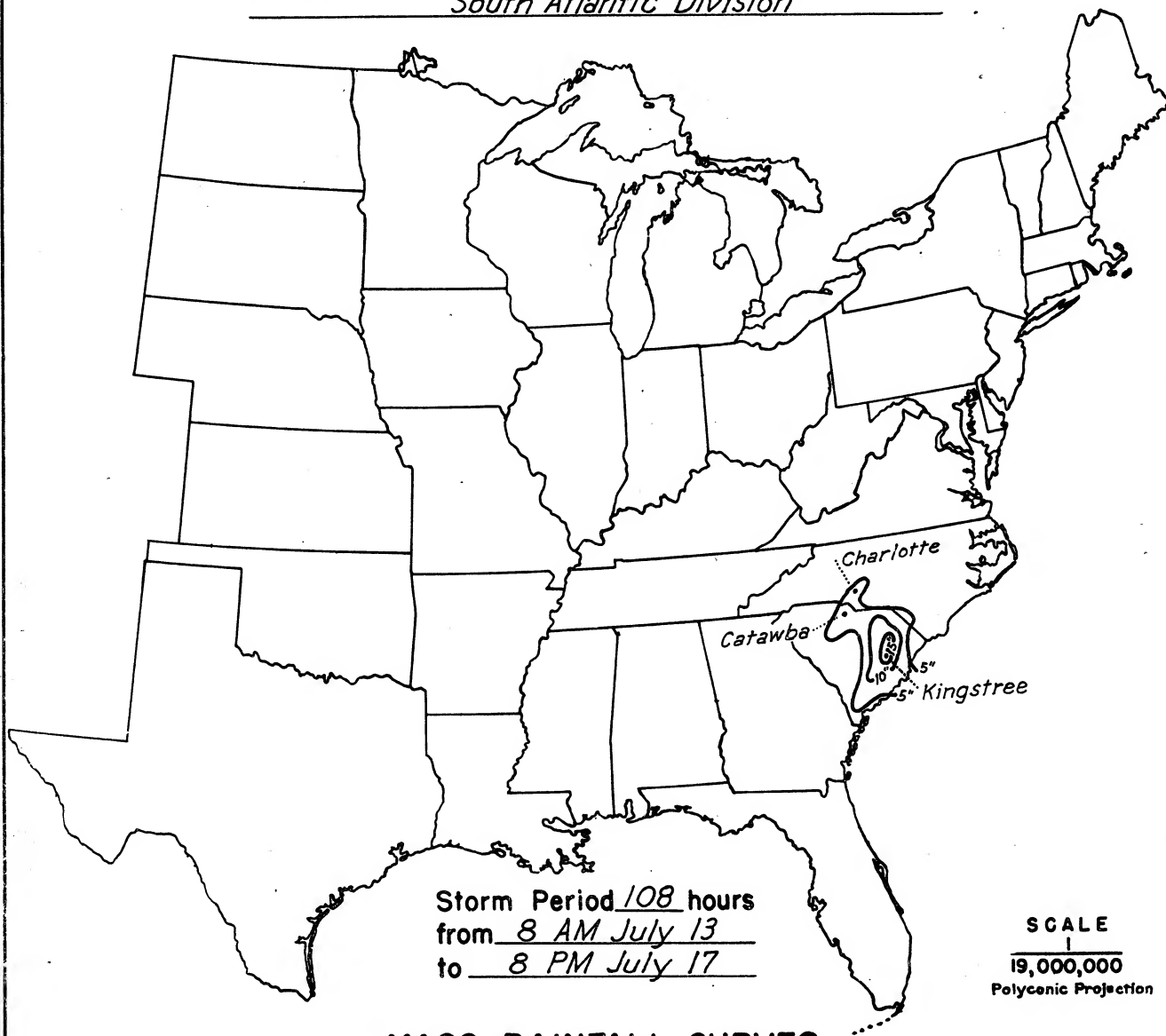
Data relating to periods of maximum rainfall----- 1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

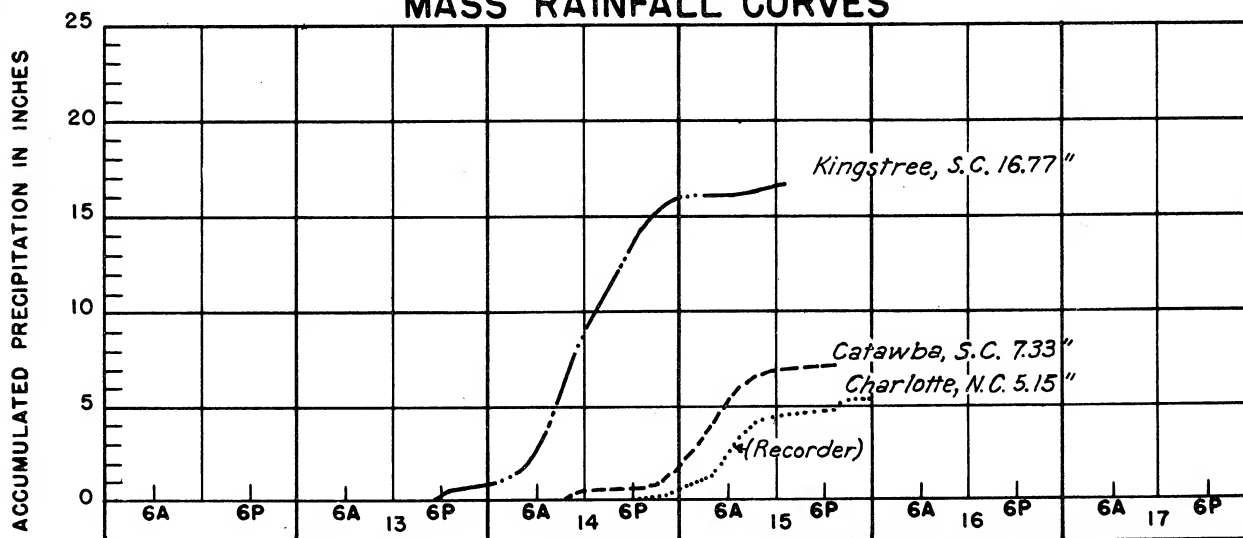
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	5.7	10.8	14.5	15.1	15.5	16.0	16.8	16.8	16.8	16.8	16.8
100	5.4	10.5	13.7	15.0	15.3	15.9	16.7	16.7	16.7	16.7	16.7
200	5.2	10.3	13.3	14.9	15.1	15.7	16.4	16.5	16.5	16.5	16.5
500	4.9	9.8	12.5	14.4	14.5	15.2	15.7	15.9	15.9	15.9	15.9
1,000	4.6	9.2	11.7	13.5	13.7	14.4	15.0	15.1	15.1	15.1	15.1
2,000	4.2	8.5	10.6	12.2	12.4	13.2	13.9	14.0	14.0	14.0	14.0
5,000	3.5	6.9	8.7	10.0	10.4	11.2	11.8	12.0	12.0	12.0	12.0
10,000	2.8	5.4	7.0	8.1	8.7	9.3	9.8	10.0	10.2	10.2	10.2

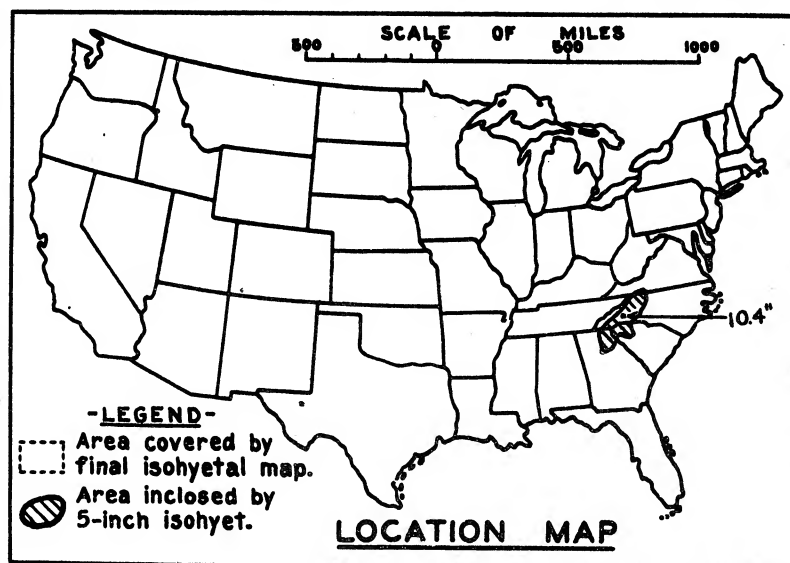
STORM STUDIES - ISOHYETAL MAP

Storm of July 13-17, 1916 Assignment SA 2-9 (a)
Study Prepared by: Charleston, S.C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 24-27, 1918

Assignment S A 2 - 10

Location No. & So. Carolina

Study Prepared by: (West)

South Atlantic Division

Charleston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 1-28-44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9-4-45

Remarks: Center at:

Tryon, N. C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 12

Form 5001-B (24-hour " ")----- --

Form 5001-D (" " " ")----- 4

Misc. precip. records, meteorological data, etc.----- --

Form 5002 (Mass rainfall curves)----- 10

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 7

Maximum duration-depth-area curves----- 1

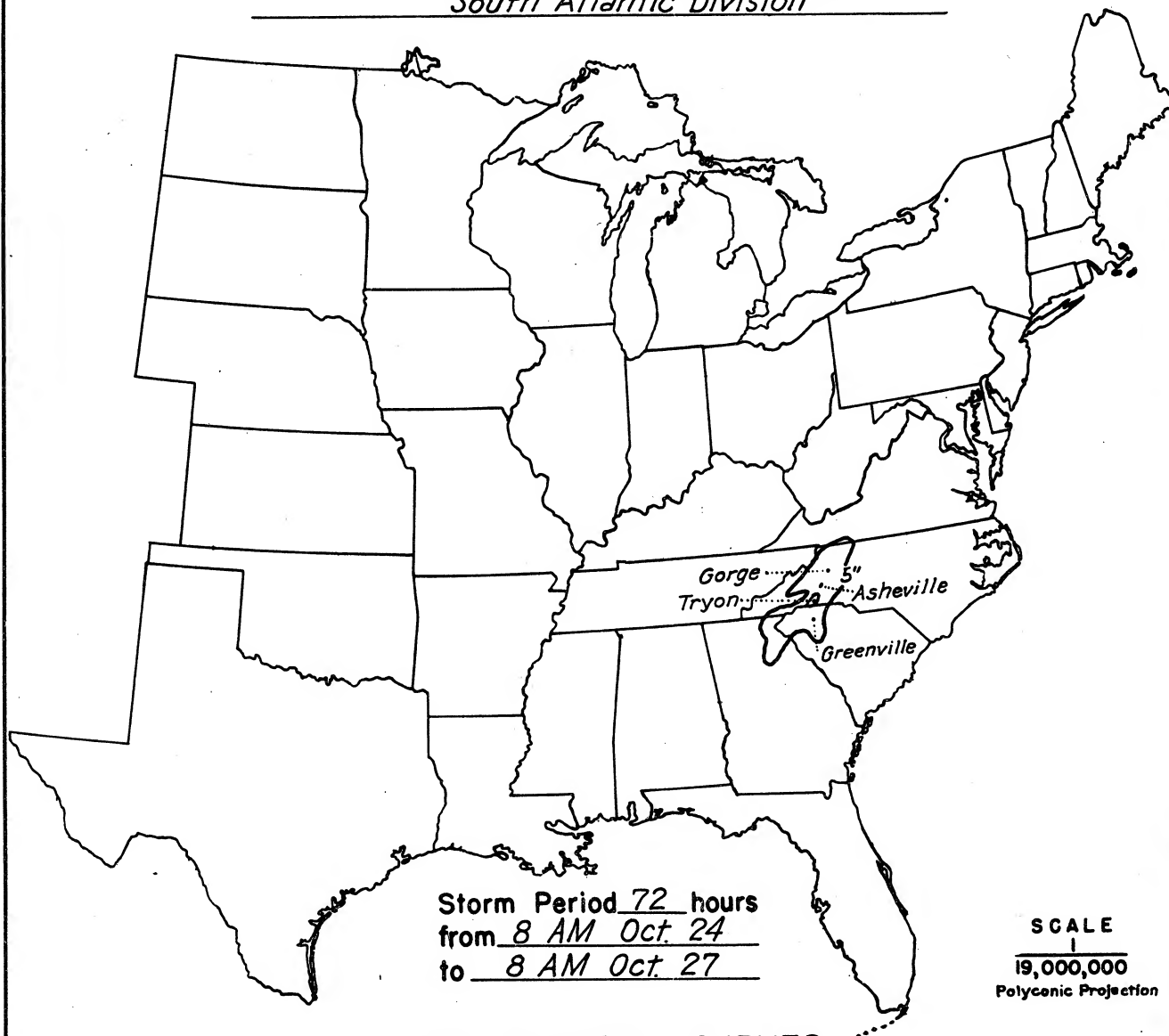
Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

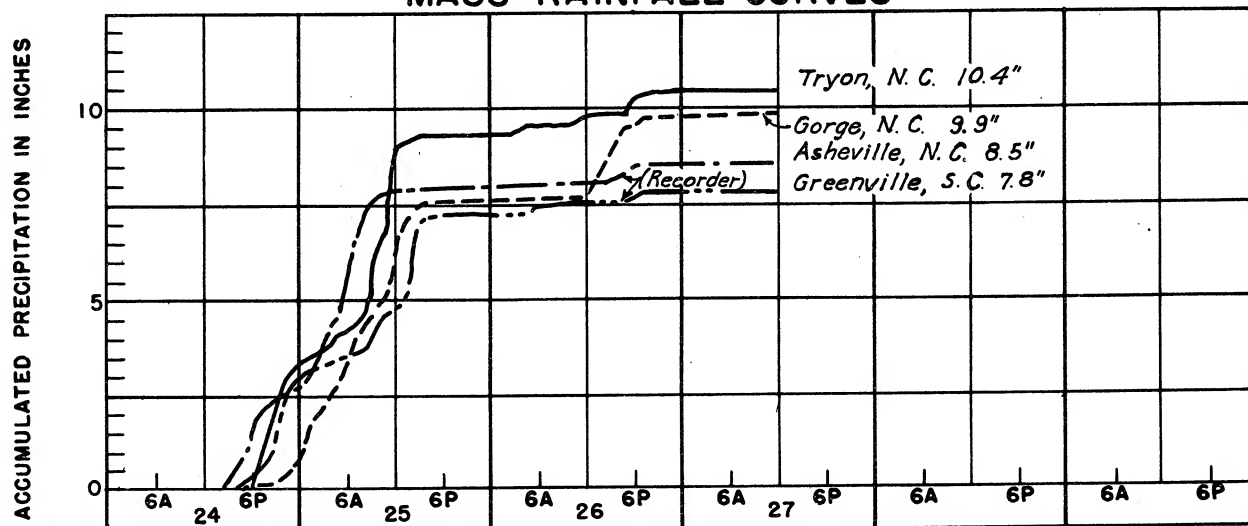
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	4.5	6.0	7.7	9.2	9.2	9.2	10.1	10.4	10.4	
100	3.8	5.7	7.1	8.2	8.2	8.4	9.8	10.0	10.0	
200	3.6	5.6	6.9	7.9	7.9	8.1	9.6	9.8	9.8	
500	3.3	5.4	6.5	7.5	7.6	7.7	9.3	9.6	9.6	
1,000	3.0	5.1	6.2	7.1	7.2	7.4	9.0	9.4	9.4	
2,000	2.7	4.7	5.8	6.8	6.9	7.1	8.4	9.1	9.1	
5,000	2.2	3.9	5.1	6.2	6.4	6.5	7.3	8.2	8.2	
10,000	1.8	3.2	4.4	5.5	5.7	5.8	6.3	7.3	7.3	
17,200	1.4	2.7	3.7	4.7	5.0	5.1	5.4	6.3	6.3	

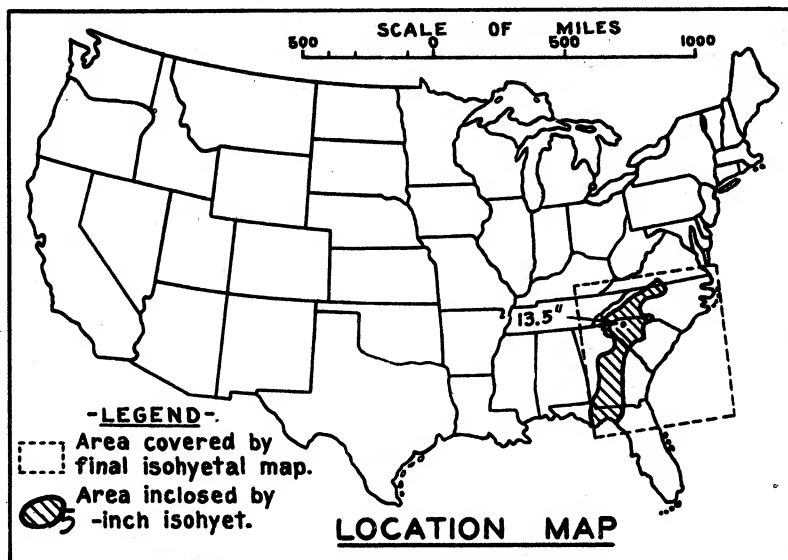
STORM STUDIES - ISOHYETAL MAP

Storm of October 24-27, 1918 Assignment SA-2-10
Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 13 - 17, 1928
 Assignment SA 2 - 13
 Location N.C., S.C., Ga., & Fla.
 Study Prepared by:
 South Atlantic Division
 Charleston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/23/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/26/45

Remarks:
 Centers at Caesars Head, S.C.
 and Linville Falls, N.C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	12
Form 5001-B (24-hour " ")-----	30
Form 5001-D (" " " ")-----	1
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	31

PART II

Final isohyetal maps, in 1 sheet, scale 1: 1,000,000

Data and computation sheets:

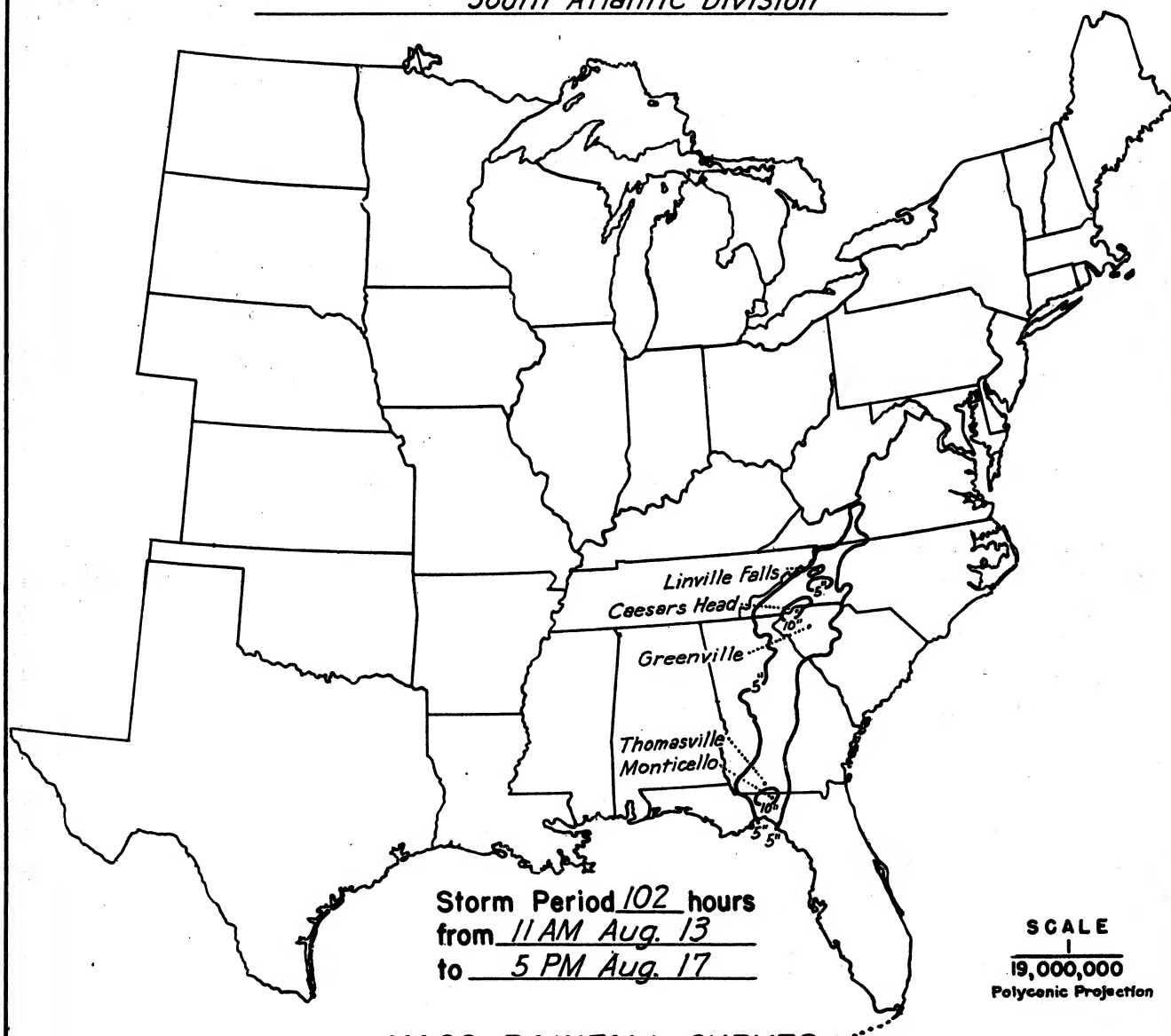
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	20
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

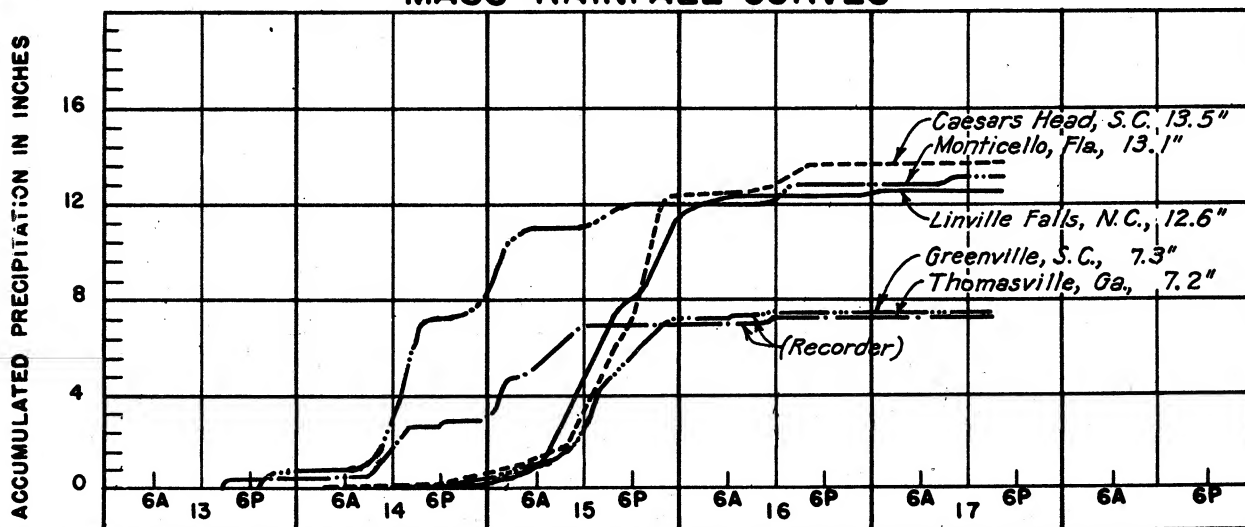
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	102	
10	6.0	9.9	10.9	11.8	12.0	12.4	13.1	13.3	13.5	13.5	
100	5.4	9.1	10.4	11.0	11.2	11.4	12.3	12.5	13.0	13.2	
200	5.1	8.8	10.1	10.7	10.9	11.1	11.9	12.1	12.7	12.9	
500	4.6	8.1	9.6	10.1	10.3	10.5	11.2	11.5	12.0	12.3	
1,000	4.2	7.4	8.9	9.4	9.7	9.9	10.4	10.8	11.3	11.6	
2,000	3.8	6.5	8.0	8.6	9.0	9.2	9.7	10.1	10.5	10.8	
5,000	3.2	5.3	6.7	7.3	7.8	8.1	8.6	8.9	9.3	9.6	
10,000	2.7	4.4	5.6	6.3	6.7	7.2	7.7	8.1	8.4	8.6	
20,000	2.2	3.5	4.6	5.2	5.7	6.2	6.8	7.2	7.4	7.6	
50,000	1.4	2.3	3.0	3.6	4.1	4.8	5.4	5.8	5.9	6.2	
77,300	1.0	1.7	2.3	2.9	3.4	3.9	4.5	4.9	5.0	5.3	

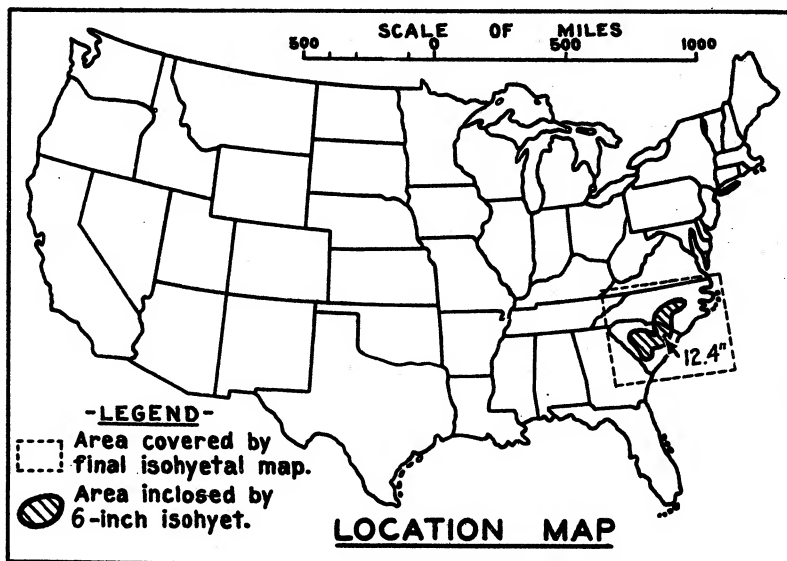
STORM STUDIES - ISOHYETAL MAP

Storm of August 13-17, 1928 Assignment SA 2-13
Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 4-7, 1928

Assignment SA 2-14

Location No. & So. Carolina

Study Prepared by: (east)

South Atlantic Division

Charleston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12/21/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/6/44

Remarks: Center at

Marion, S. C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	13
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	5
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	11

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

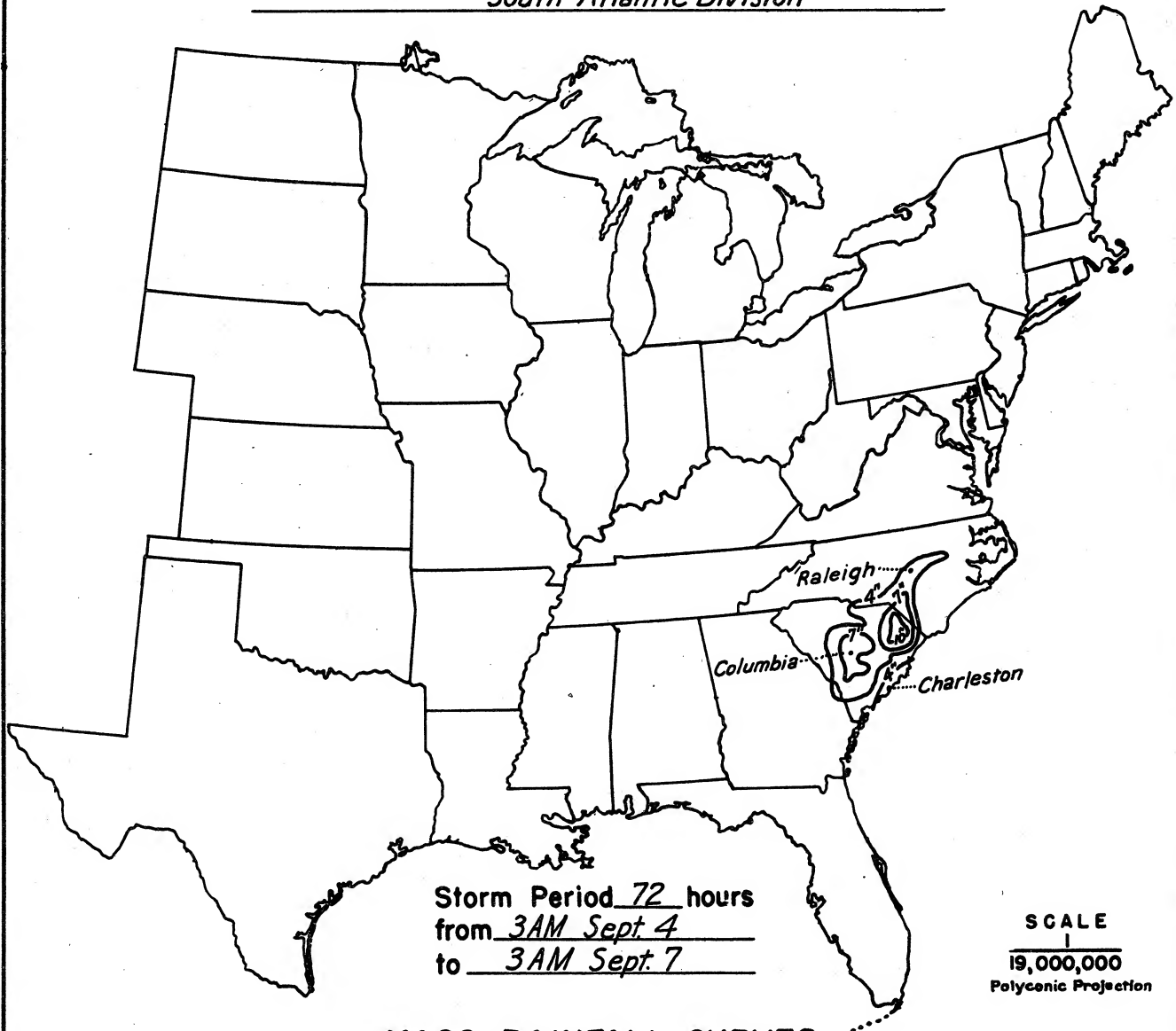
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

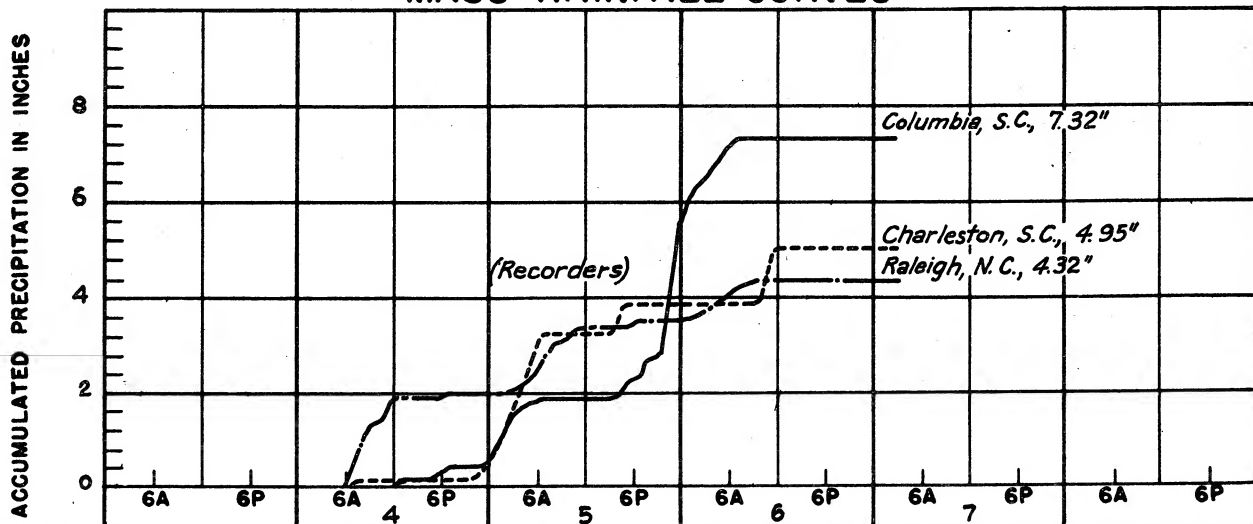
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	6.1	6.5	6.5	6.8	8.2	8.7	11.2	12.1	12.4	
100	5.6	5.9	5.9	6.2	7.6	7.9	10.2	11.2	11.6	
200	5.3	5.6	5.7	5.9	7.4	7.7	9.8	10.8	11.2	
500	4.9	5.2	5.3	5.4	7.0	7.3	9.2	10.2	10.4	
1,000	4.4	4.7	4.8	4.9	6.6	6.9	8.6	9.4	9.7	
2,000	3.7	4.1	4.4	4.5	5.9	6.3	7.9	8.6	8.8	
5,000	2.7	3.4	3.7	3.8	5.1	5.6	6.8	7.4	7.7	
10,000	1.9	2.7	3.1	3.3	4.4	5.0	6.0	6.5	6.7	
19,600	1.2	2.2	2.5	2.8	3.8	4.5	5.1	5.6	5.7	

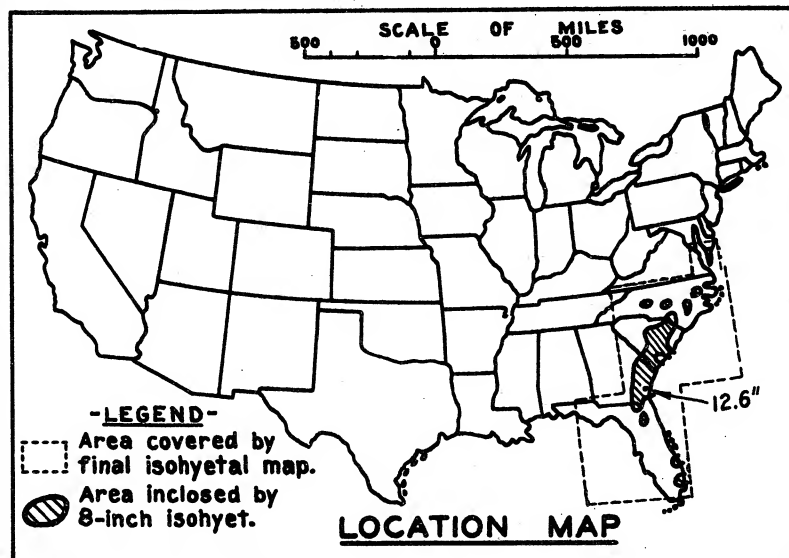
STORM STUDIES - ISOHYETAL MAP

Storm of September 4-7, 1928 Assignment SA 2-14
Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 16-19, 1928

Assignment SA 2 - 15

Location Fla., Ga., N.C., S.C.,

Study Prepared by: Va. & Md.

South Atlantic Division

Charleston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2/13/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4/26/45

Remarks: Centers at

Darlington S.C. and
St. George, Ga.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 4 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	15
Form 5001-B (24-hour " ").....	36
Form 5001-D (" " " ").....	-
Miscl. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	37

PART II

Final isohyetal maps, in 2 sheet, scale 1 : 1,000,000

Data and computation sheets:

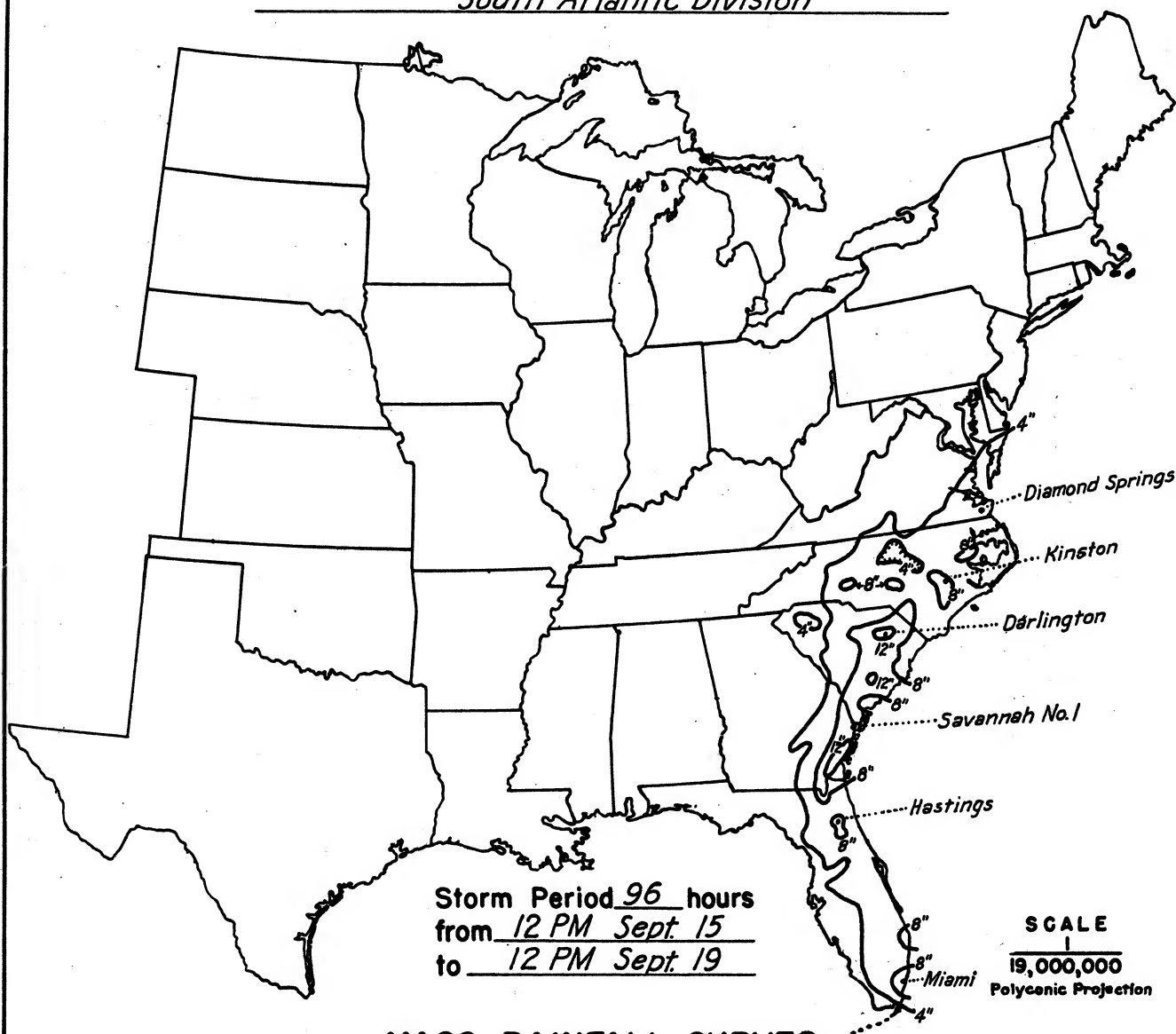
Form S-10 (Data from mass rainfall curves).....	4
Form S-11 (Depth-area data from isohyetal map).....	3
Form S-12 (Maximum depth-duration data).....	22
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

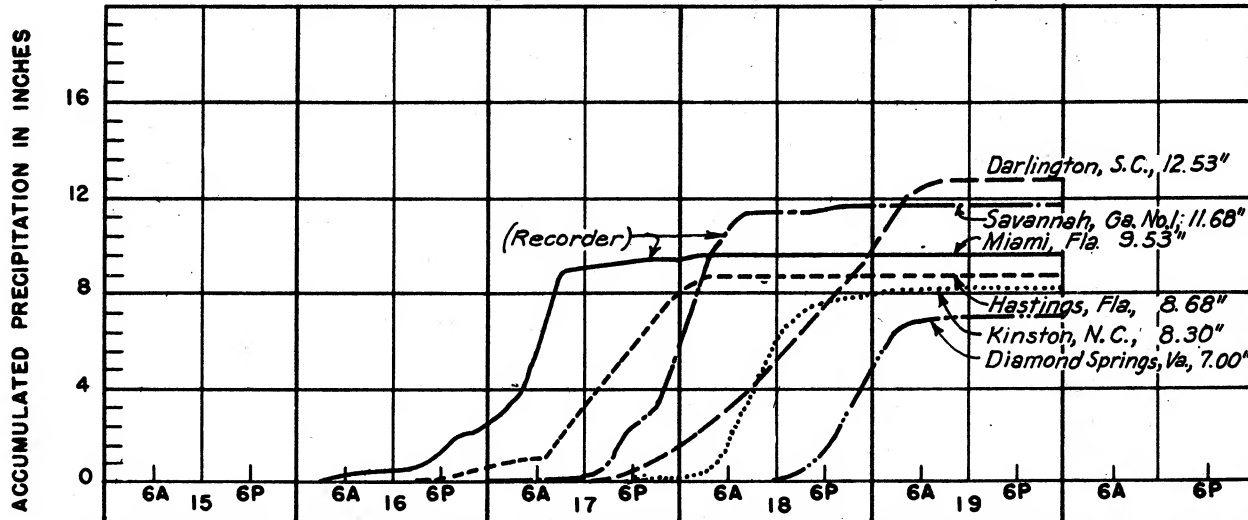
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	7.0	10.2	11.0	11.6	12.0	12.2	12.6	12.6	12.6	12.6
100	5.9	9.4	10.4	11.4	11.8	12.1	12.4	12.4	12.4	12.4
200	5.5	9.2	10.2	11.2	11.8	12.0	12.4	12.4	12.4	12.4
500	5.0	8.8	9.8	11.0	11.5	11.8	12.2	12.2	12.2	12.2
1,000	4.6	8.4	9.5	10.8	11.3	11.6	12.0	12.0	12.0	12.0
2,000	4.2	8.0	9.2	10.3	10.9	11.3	11.6	11.6	11.6	11.6
5,000	3.7	7.1	8.3	9.4	10.3	10.6	10.9	11.0	11.0	11.0
10,000	3.2	6.1	7.4	8.5	9.4	9.8	10.2	10.4	10.4	10.4
20,000	2.7	5.0	6.3	7.3	8.2	8.8	9.3	9.5	9.6	9.6
50,000	2.0	3.6	4.8	5.6	6.3	6.9	7.6	7.8	8.0	8.0
100,000	1.4	2.4	3.3	3.9	4.6	5.0	5.8	6.2	6.5	6.6

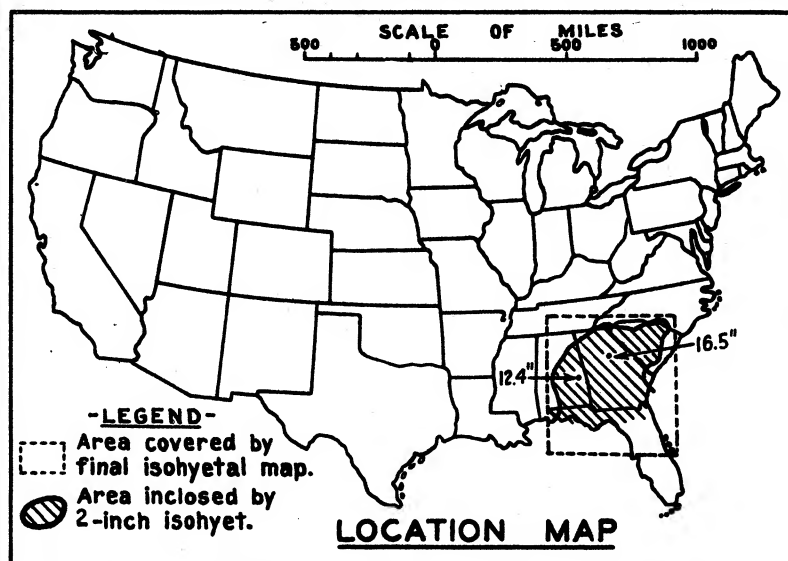
STORM STUDIES - ISOHYETAL MAP

Storm of September 16-19, 1928 Assignment SA 2-15
 Study Prepared by: Charleston, S. C. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 27 - 31, 1887
 Assignment SA 3 - 1
 Location Northern Georgia
 Study Prepared by:
 South Atlantic Division
 Savannah District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/13/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/27/45
 Remarks: Center at
 Union Point, Georgia

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data) ----- 14
 Form 5001-B (24-hour " ") ----- 15
 Form 5001-D (" " " ") ----- -
 Misc. precip. records, meteorological data, etc. ----- -
 Form 5002 (Mass rainfall curves) ----- 13

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

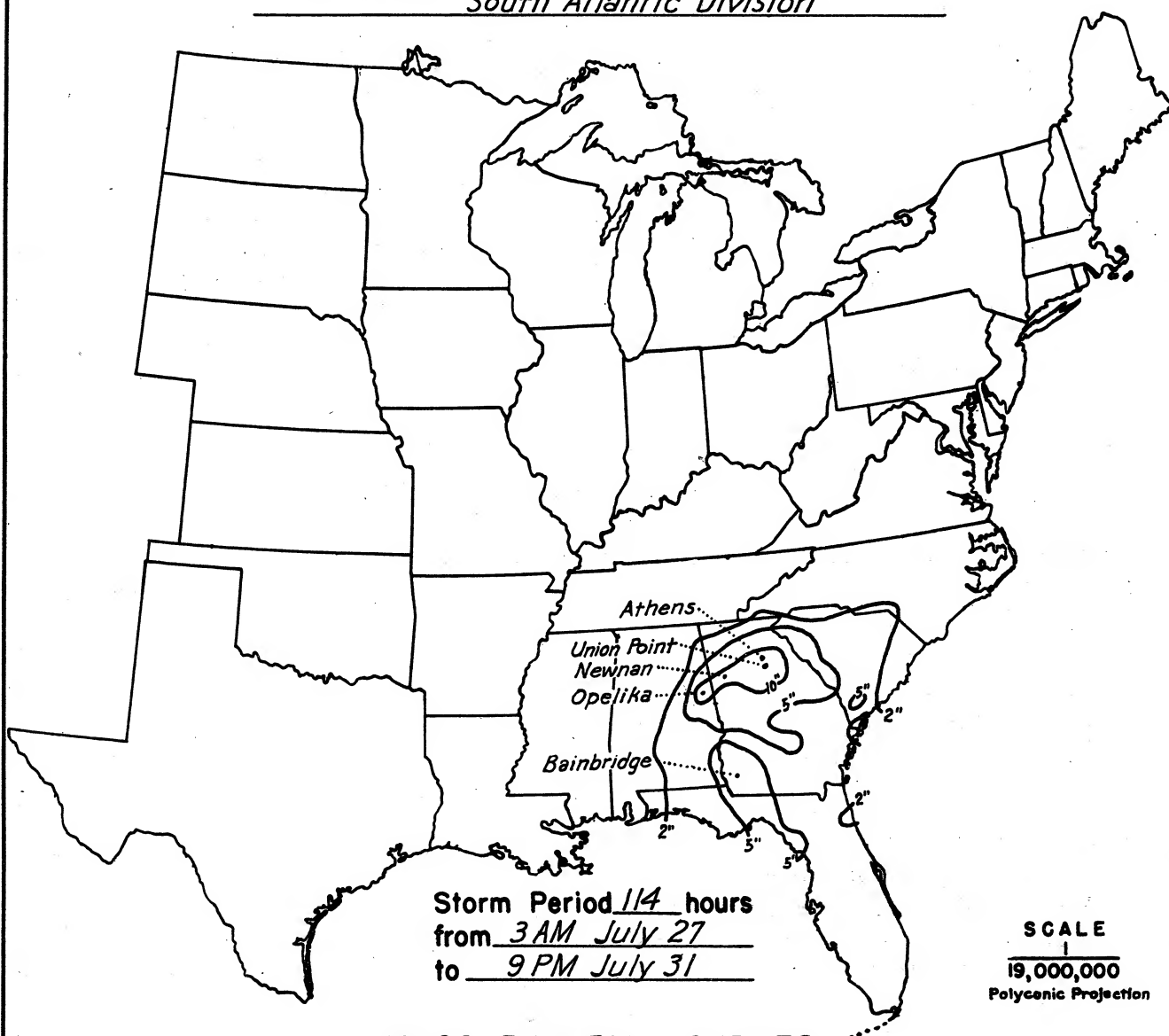
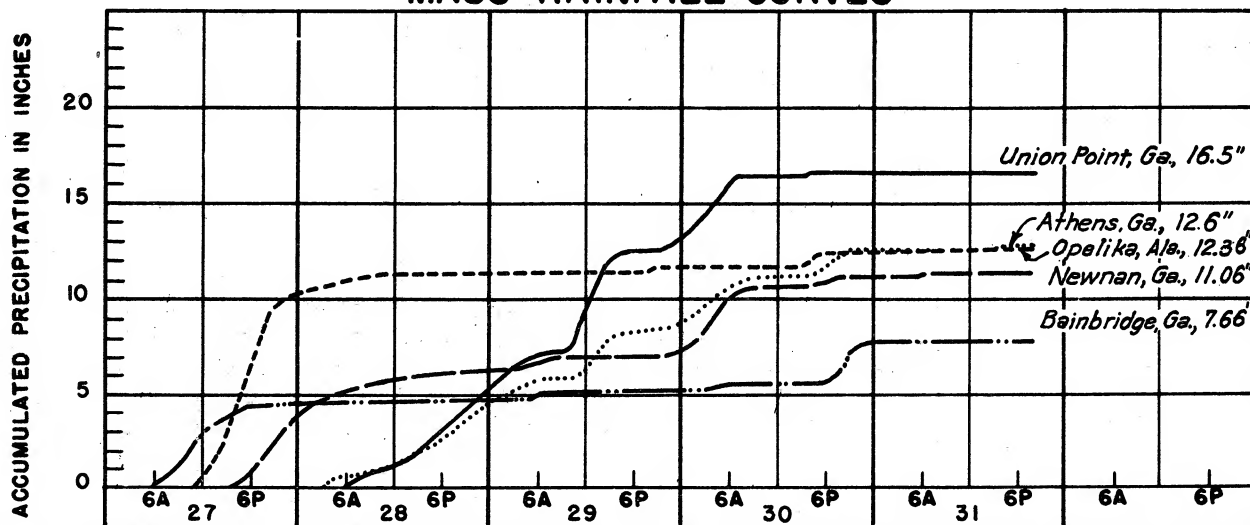
Form S-10 (Data from mass rainfall curves) ----- 2
 Form S-11 (Depth-area data from isohyetal map) ----- 2
 Form S-12 (Maximum depth-duration data) ----- 12
 Maximum duration-depth-area curves ----- 1
 Data relating to periods of maximum rainfall ----- 2

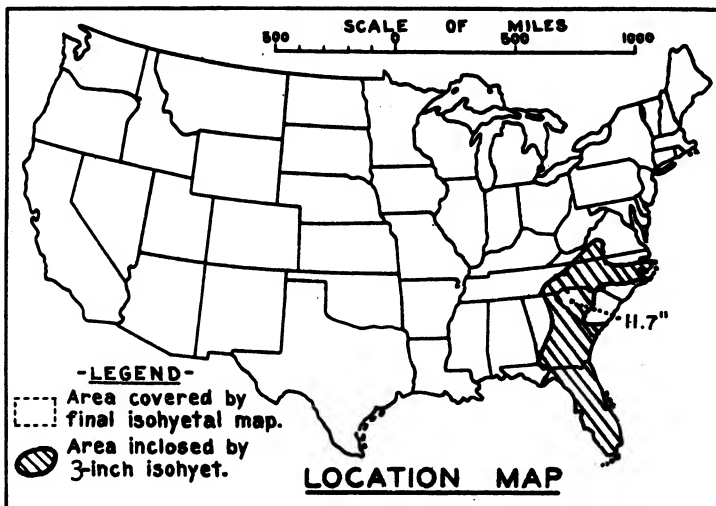
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	144
10	7.0	9.8	10.7	11.0	11.5	13.0	15.8	16.5	16.5	16.5	16.5
100	6.2	9.2	10.2	10.5	11.1	12.5	15.3	16.1	16.2	16.2	16.2
200	5.8	8.8	9.9	10.2	10.8	12.2	14.9	15.7	15.9	15.9	15.9
500	5.3	8.1	9.3	9.7	10.2	11.6	14.2	15.0	15.4	15.4	15.4
1,000	4.9	7.4	8.6	9.0	9.6	10.7	13.5	14.3	14.8	14.8	14.9
2,000	4.5	6.6	7.6	8.2	8.6	9.7	12.3	13.2	13.9	14.0	14.1
5,000	3.7	5.4	6.2	6.7	7.0	7.9	10.0	11.3	12.2	12.6	12.7
10,000	2.9	4.4	5.1	5.4	5.6	6.3	8.2	9.6	10.6	11.4	11.5
20,000	2.1	3.4	3.8	4.1	4.3	4.8	6.2	7.3	8.8	9.7	9.8
50,000	1.3	2.1	2.5	2.7	3.0	3.3	3.8	4.8	5.8	7.2	7.3
100,000	0.8	1.3	1.6	1.9	2.2	2.5	2.9	3.7	4.4	5.4	5.5

STORM STUDIES - ISOHYETAL MAP

Storm of July 27-31, 1887 Assignment SA 3-1
Study Prepared by: Savannah, Ga. District
South Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 8-12 Sept. 1888

Assignment SA 3-2

Location Southeastern States

Study Prepared by:

South Atlantic Division
Savannah District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 10/9/51Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10-14-60Remarks: Center at Greenwood,
South CarolinaDewpt. 75° - Ref. Pt.
180 ESE.

Grid H-8

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	0
Form 5001-B (24-hour " " " ").....	0
Form 5001-D (" " " " " ").....	4
Miscl. precip. records, meteorological data, etc.....	0
Form 5002 (Mass rainfall curves).....	12

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

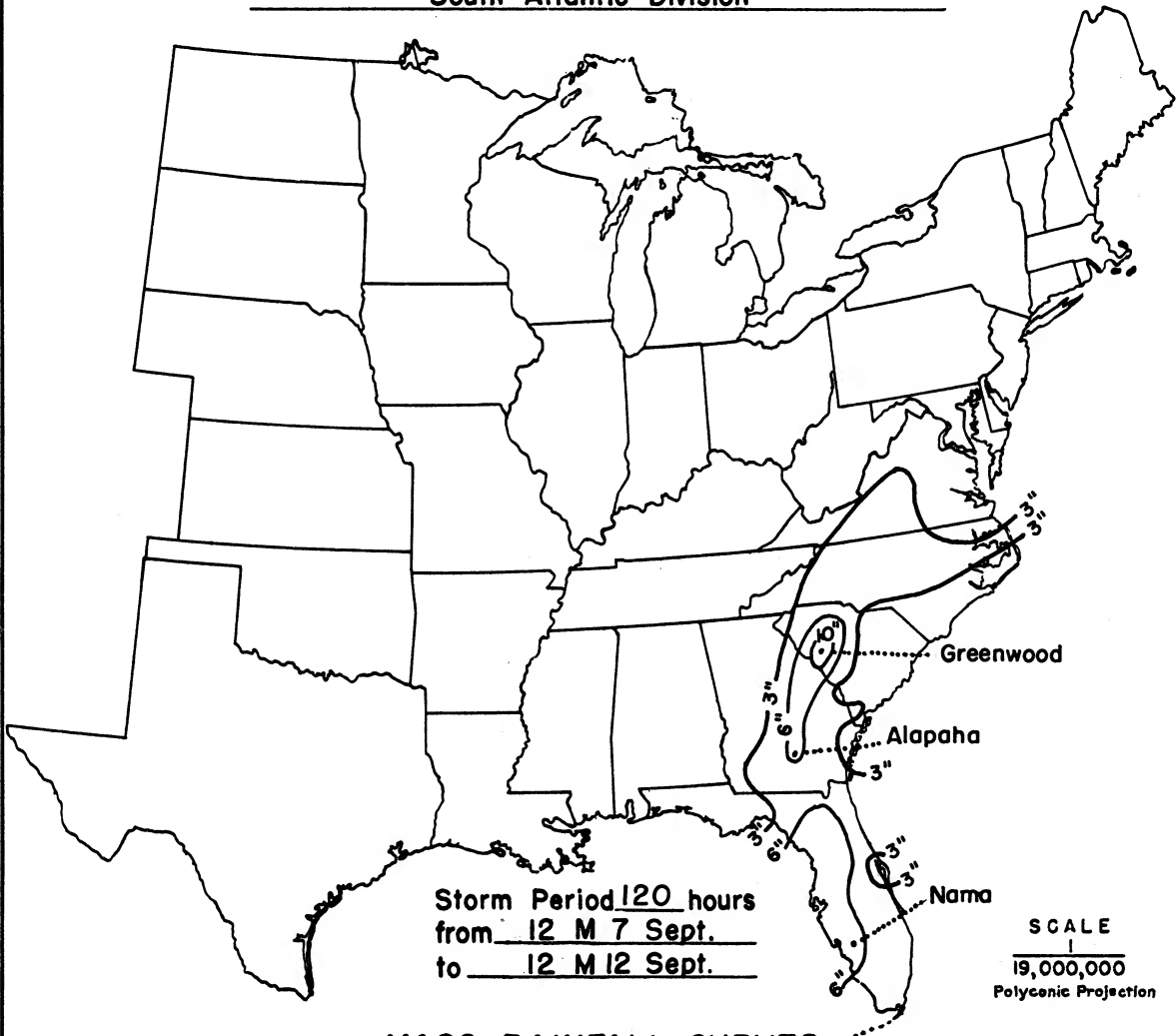
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	5
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

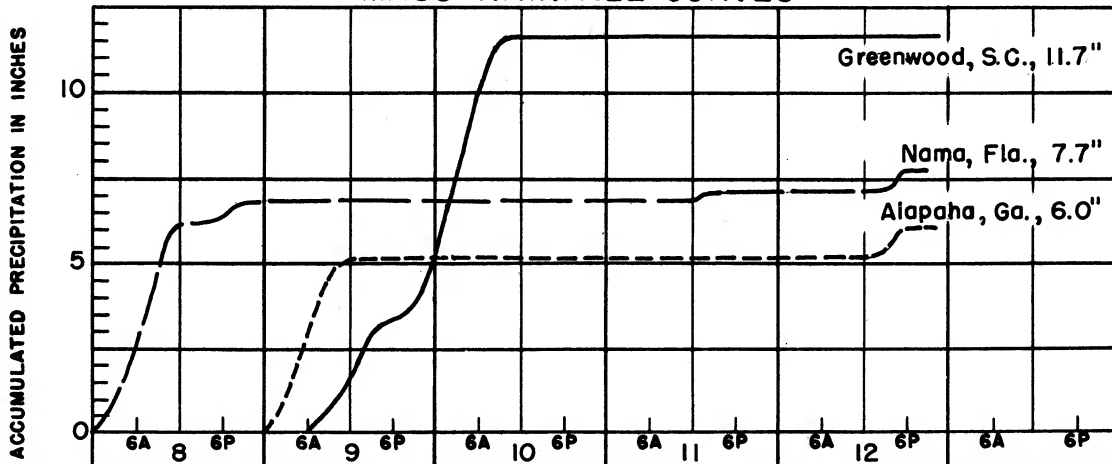
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	5.8	7.8	8.6	11.1	11.6	11.7	11.7	11.7	11.7	11.7	11.7
100	5.1	7.1	8.2	9.9	11.3	11.4	11.4	11.4	11.4	11.4	11.4
200	4.9	6.9	8.0	9.5	11.0	11.1	11.1	11.1	11.1	11.1	11.1
500	4.5	6.5	7.5	8.9	10.3	10.4	10.4	10.4	10.4	10.4	10.4
1000	4.1	6.2	7.0	8.4	9.6	9.8	9.8	9.8	9.8	9.8	9.8
2000	3.6	5.7	6.4	7.7	8.8	9.0	9.0	9.0	9.0	9.0	9.0
5000	3.0	5.1	5.5	6.7	7.6	7.8	7.9	8.0	8.0	8.0	8.0
10,000	2.5	4.4	4.8	5.8	6.6	6.8	7.0	7.1	7.2	7.2	7.3
20,000	2.1	3.6	4.0	4.9	5.6	5.8	6.1	6.3	6.3	6.3	6.5
50,000	1.5	2.5	3.0	3.7	4.2	4.4	4.8	5.1	5.2	5.2	5.5
100,000	1.1	1.7	2.2	2.7	3.1	3.3	3.8	4.2	4.3	4.4	4.7
120,000	1.0	1.5	2.0	2.5	2.9	3.1	3.6	4.0	4.1	4.2	4.5

STORM STUDIES - ISOHYETAL MAP

Storm of 8-12 September 1888 Assignment SA 3-2Study Prepared by: Savannah, Ga., District
South Atlantic Division

MASS RAINFALL CURVES



South Atlantic Division
Savannah District

Remarks: Center at Kosciusko,
Miss., Dewpt. 66°, Ref. Pt.
220 SSE

Grid H-12

PART I

(Number of Sheets)

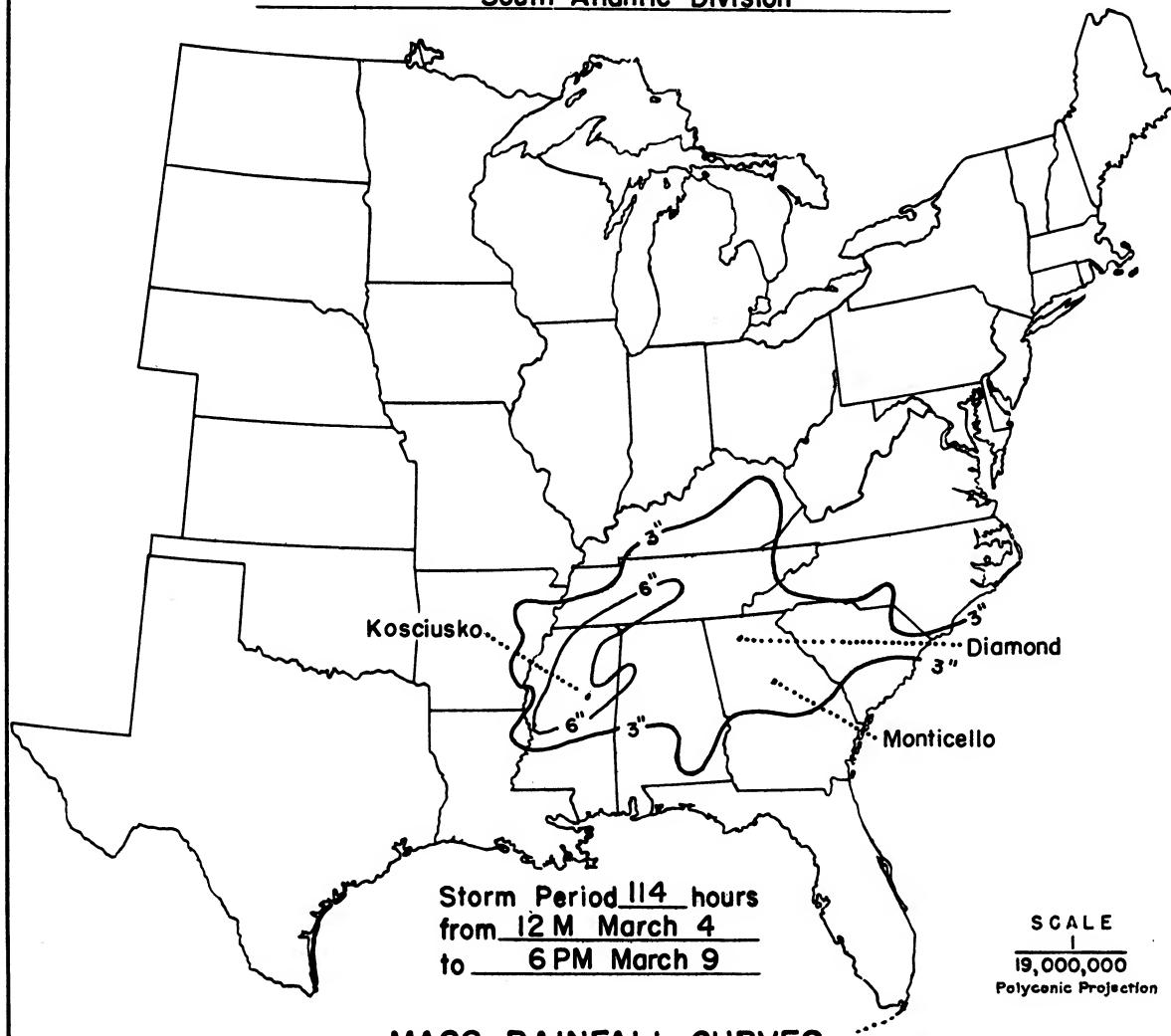
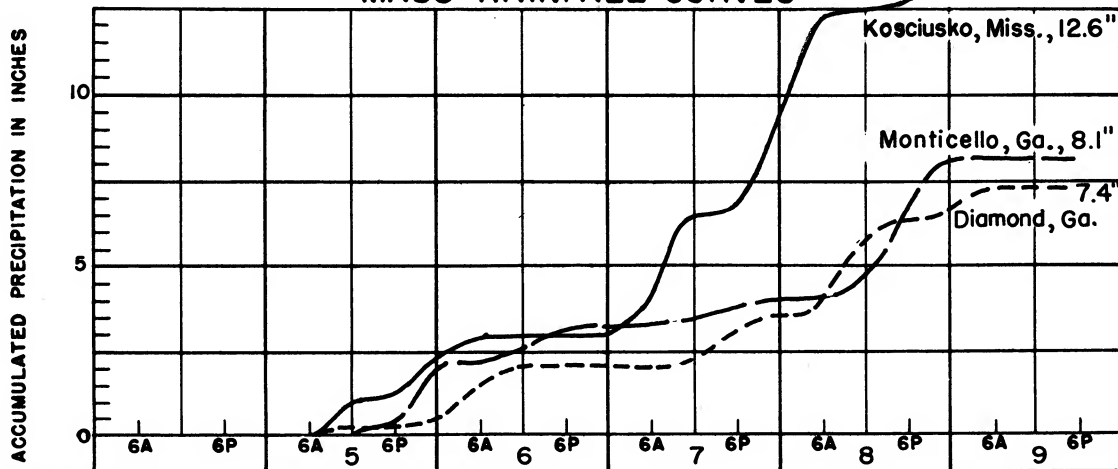
Form 5001-C (Hourly precip. data)-----	1
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	10
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	28

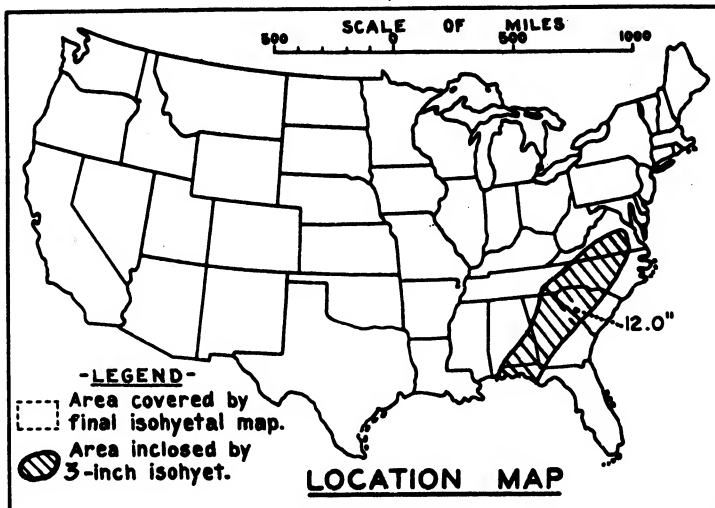
PART II

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	5.3	5.7	7.2	8.4	9.4	9.7	9.7	11.1	12.3	12.6	12.6
100	4.4	5.6	6.3	8.2	9.2	9.3	9.5	10.8	12.0	12.3	12.3
200	4.2	5.5	6.0	8.0	9.0	9.1	9.2	10.6	11.8	12.1	12.1
500	3.8	5.1	5.5	7.6	8.5	8.6	8.7	10.1	11.2	11.8	11.8
1000	3.5	4.7	5.1	7.2	8.0	8.1	8.3	9.6	10.5	11.2	11.2
2000	3.2	4.3	4.7	6.6	7.4	7.5	7.7	9.0	9.9	10.5	10.5
5000	2.7	3.7	4.1	5.9	6.5	6.7	6.8	8.1	9.0	9.6	9.6
10,000	2.4	3.2	3.7	5.2	5.8	6.0	6.2	7.4	8.3	8.8	8.8
20,000	1.9	2.7	3.3	4.6	5.1	5.3	5.5	6.7	7.6	8.1	8.1
50,000	1.3	2.1	2.6	3.7	4.2	4.4	4.6	5.7	6.5	7.0	7.0
100,000	0.9	1.6	2.1	3.0	3.4	3.6	3.9	4.7	5.5	6.1	6.1
185,000	0.6	1.1	1.6	2.1	2.5	2.8	3.3	3.7	4.3	5.1	5.1

STORM STUDIES - ISOHYETAL MAPStorm of 5-9 March 1891Assignment SA 3-3Study Prepared by: Savannah, Ga., District
South Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 6-8 July 1896
 Assignment SA 3-4
 Location Southeastern U.S.
 Study Prepared by:
 South Atlantic Division
 Savannah District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/31/51
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/19/59
 Remarks: Center at Greenwood,
 S.C. Dewpoint 73° F Ref Pt
 195 SSW

Grid H-8

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1: 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	1
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	10
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	28

PART II

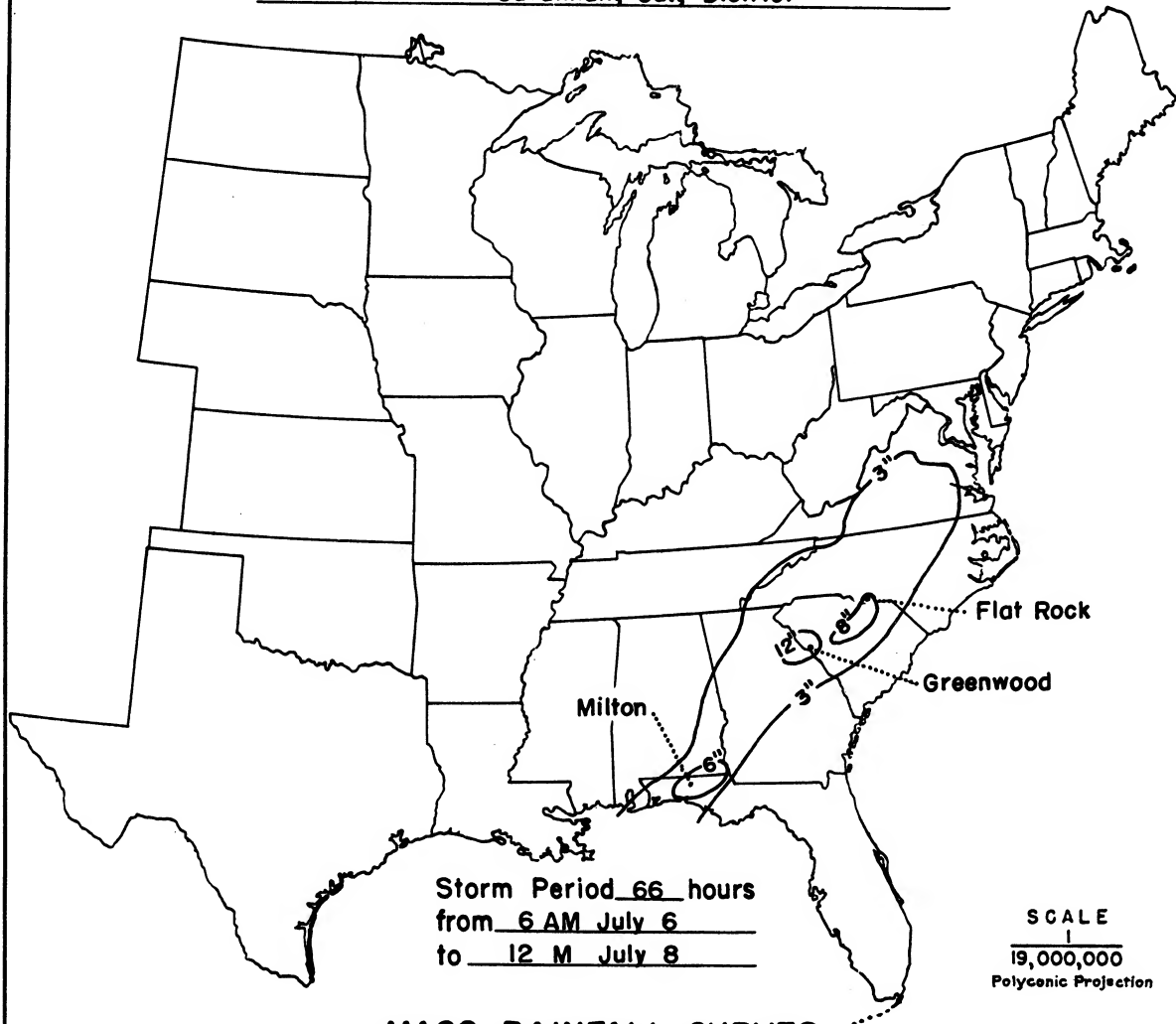
Final isohyetal maps, in 1 sheet, scale 1: 1,000,000

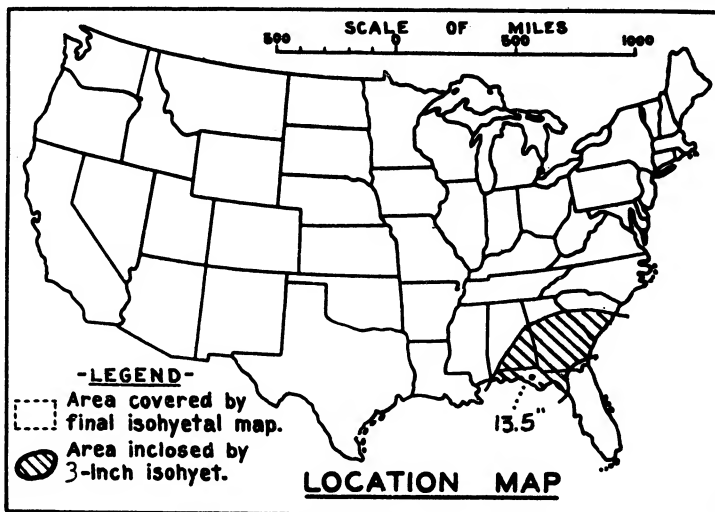
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48	60	66			
10	4.3	6.6	7.8	9.0	10.0	10.9	12.0	12.0	12.0			
100	3.4	5.6	6.7	7.8	8.7	9.5	10.6	10.6	10.6			
200	3.0	5.3	6.3	7.4	8.2	9.0	10.1	10.1	10.1			
500	2.3	4.5	5.6	6.6	7.3	8.1	9.3	9.3	9.3			
1,000	1.9	3.9	5.0	6.0	6.7	7.4	8.7	8.7	8.7			
2,000	1.5	3.4	4.5	5.4	6.1	6.7	8.1	8.1	8.1			
5,000	1.3	2.8	3.9	4.7	5.4	5.9	7.1	7.3	7.3			
10,000	1.2	2.4	3.5	4.2	4.8	5.3	6.4	6.7	6.7			
20,000	1.1	2.1	3.1	3.8	4.4	4.8	5.8	6.3	6.3			
50,000	1.0	1.7	2.6	3.3	3.8	4.2	5.1	5.6	5.6			
100,000	0.8	1.5	2.3	2.9	3.4	3.8	4.6	5.0	5.0			
118,000	0.7	1.4	2.1	2.7	3.2	3.5	4.2	4.7	4.7			

STORM STUDIES - ISOHYETAL MAPStorm of 6-8 July 1896Assignment SA 3-4Study Prepared by: South Atlantic Division
Savannah, Ga., District**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 26-29 August 1898
 Assignment SA 3-5
 Location S.C., Ga., Fla., Ala.
 Study Prepared by:
 South Atlantic Division
 Savannah District

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9-7-51
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 12-4-57

Remarks: Center at
 St. Andrews Bay, Fla.,
 Dewpoint 76°, Ref. Pt. 35 E.

DATA AND COMPUTATIONS COMPILED GRID J-10**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	5
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	13

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

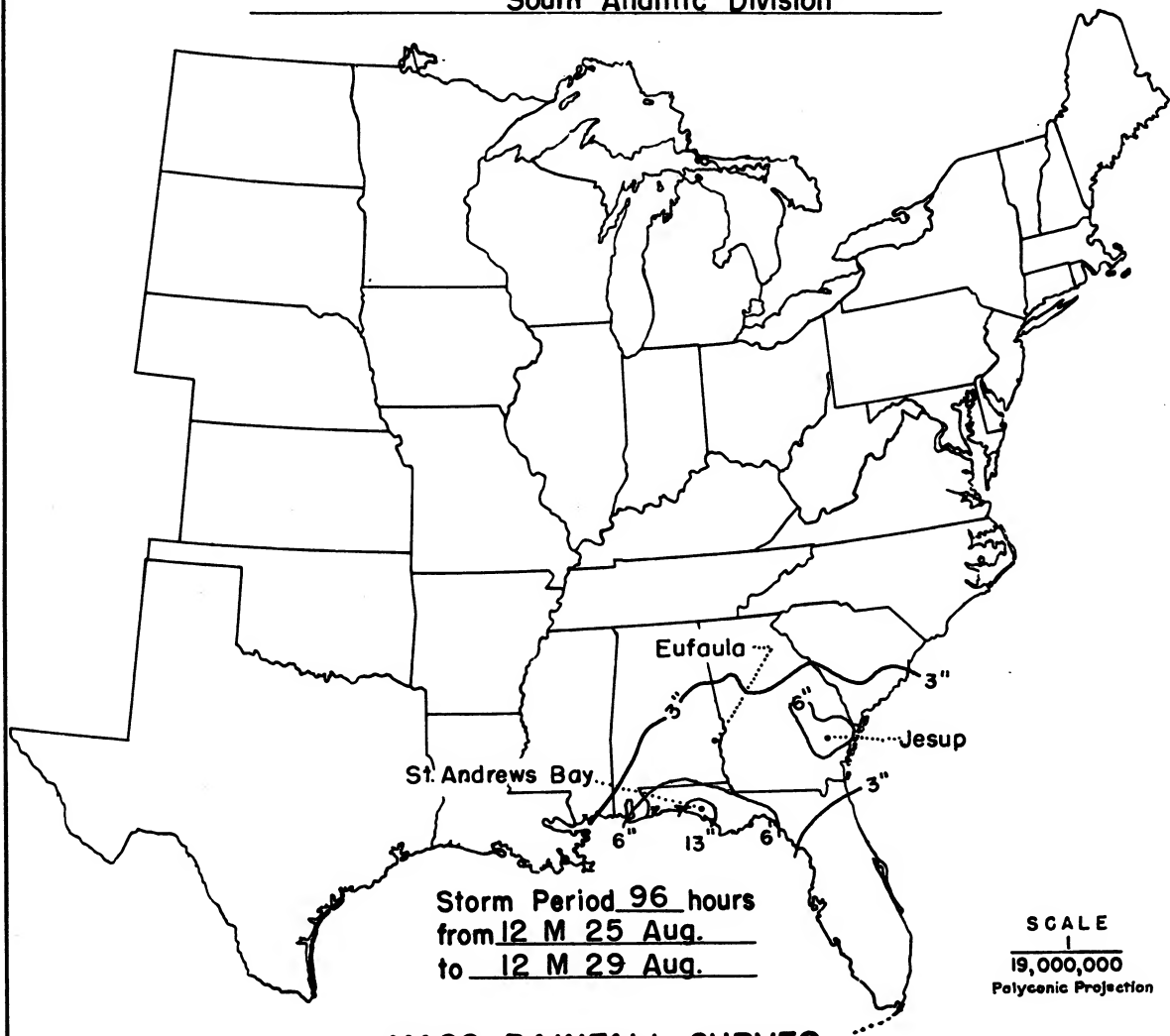
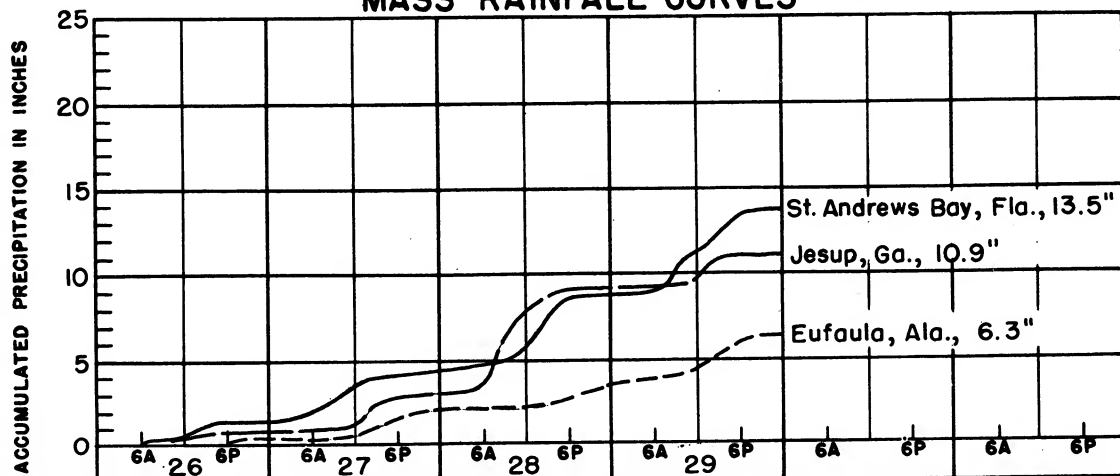
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	5

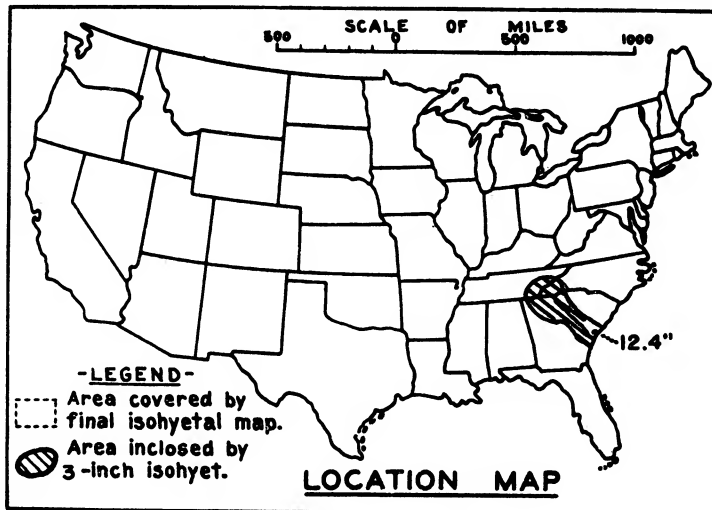
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	
10	7.0	8.6	8.6	8.6	9.2	9.6	10.6	12.0	12.3	13.5	
100	6.6	8.2	8.3	8.3	8.9	9.2	10.2	11.8	12.2	13.4	
200	6.2	7.8	7.9	8.0	8.7	9.1	10.1	11.6	12.1	13.3	
500	5.4	7.0	7.3	7.6	8.3	8.7	9.8	11.4	11.8	13.0	
1000	4.7	6.3	6.6	7.0	7.9	8.4	9.4	11.1	11.4	12.5	
2000	3.8	5.4	5.8	6.4	7.4	8.0	9.0	10.6	10.9	11.9	
5000	2.8	4.1	4.6	5.4	6.4	7.2	7.9	9.6	9.8	10.7	
10000	2.0	3.1	3.5	4.5	5.6	6.2	6.8	7.9	8.2	9.1	
20000	1.4	2.1	2.4	3.3	4.3	4.9	5.4	5.8	6.3	7.0	
50000	0.9	1.4	1.8	2.1	2.9	3.3	3.9	4.7	5.1	5.8	
64000	0.9	1.4	1.8	2.1	2.8	3.2	3.8	4.7	5.0	5.8	

STORM STUDIES - ISOHYETAL MAP

Storm of August 26-29, 1898 Assignment SA 3-5
 Study Prepared by: Savannah, Ga., District
South Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 30 Aug-3 Sept. 1898

Assignment SA 3-6

Location S.C. Ga. N.C. Tenn.

Study Prepared by:

South Atlantic Division
Savannah DistrictPart I Reviewed by H. M. Sec. of
Weather Bureau, 8/1/57Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/4/57

Remarks: Center at

Port Royal, S.C.

Dew pt. 76° Ref. Pt. 5 S.

Grid I-7

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1;2,500,000

Precipitation data and mass curves:

	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	5
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	4
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	12

PART II

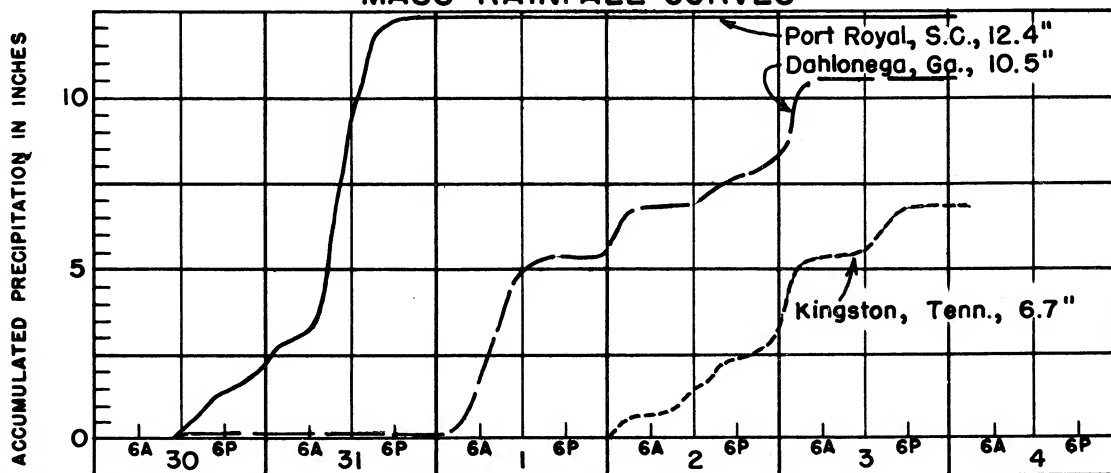
Final isohyetal maps, in 1 sheet, scale 1;1,000,000

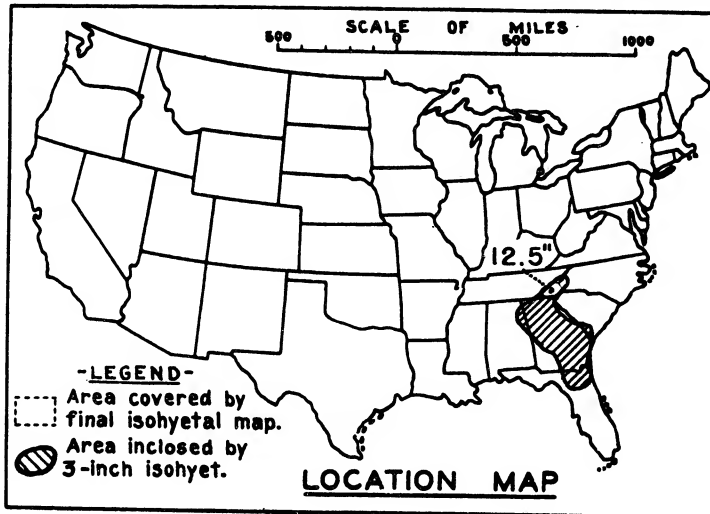
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	7.0	9.3	10.5	11.0	12.1	12.4	12.4	12.4	12.4	12.4	12.4
100	6.0	9.1	10.1	10.6	11.9	12.1	12.2	12.2	12.2	12.2	12.2
200	5.6	9.0	9.9	10.4	11.7	11.9	12.0	12.0	12.0	12.0	12.0
500	5.1	8.7	9.6	10.0	11.3	11.5	11.6	11.6	11.6	11.6	11.6
1000	4.6	8.3	9.2	9.6	10.8	11.1	11.2	11.2	11.2	11.2	11.2
2000	3.9	7.5	8.4	8.9	9.9	10.3	10.5	10.5	10.5	10.5	10.5
5000	2.8	5.5	6.6	7.3	7.9	8.4	8.9	8.9	8.9	8.9	8.9
10000	1.9	3.5	4.6	5.1	5.7	6.0	6.7	6.7	6.8	7.0	7.0
20000	1.1	2.0	2.7	3.3	3.6	4.0	4.8	5.4	5.7	6.2	6.2
42000	0.6	1.0	1.5	1.7	2.2	2.5	3.3	4.1	4.9	5.3	5.5

STORM STUDIES - ISOHYETAL MAPStorm of 30 August - 3 September 1898 Assignment SA 3-6Study Prepared by: Savannah, Ga., District
South Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 2-4 October 1898
 Assignment SA 3-7
 Location Southeastern U. S.
 Study Prepared by:

South Atlantic Division
 Savannah District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/2/51
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/22/56

Remarks: Center at Highlands,
 North Carolina
 Dewpoint 74°, Ref. Pt. 190
 SE of Highlands, N. C.
 Grid G-8

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 20
 Form 5001-B (24-hour " ")----- 0
 Form 5001-D (" " " ")----- 8
 Misc. precip. records, meteorological data, etc.----- 0
 Form 5002 (Mass rainfall curves)----- 23

PART II

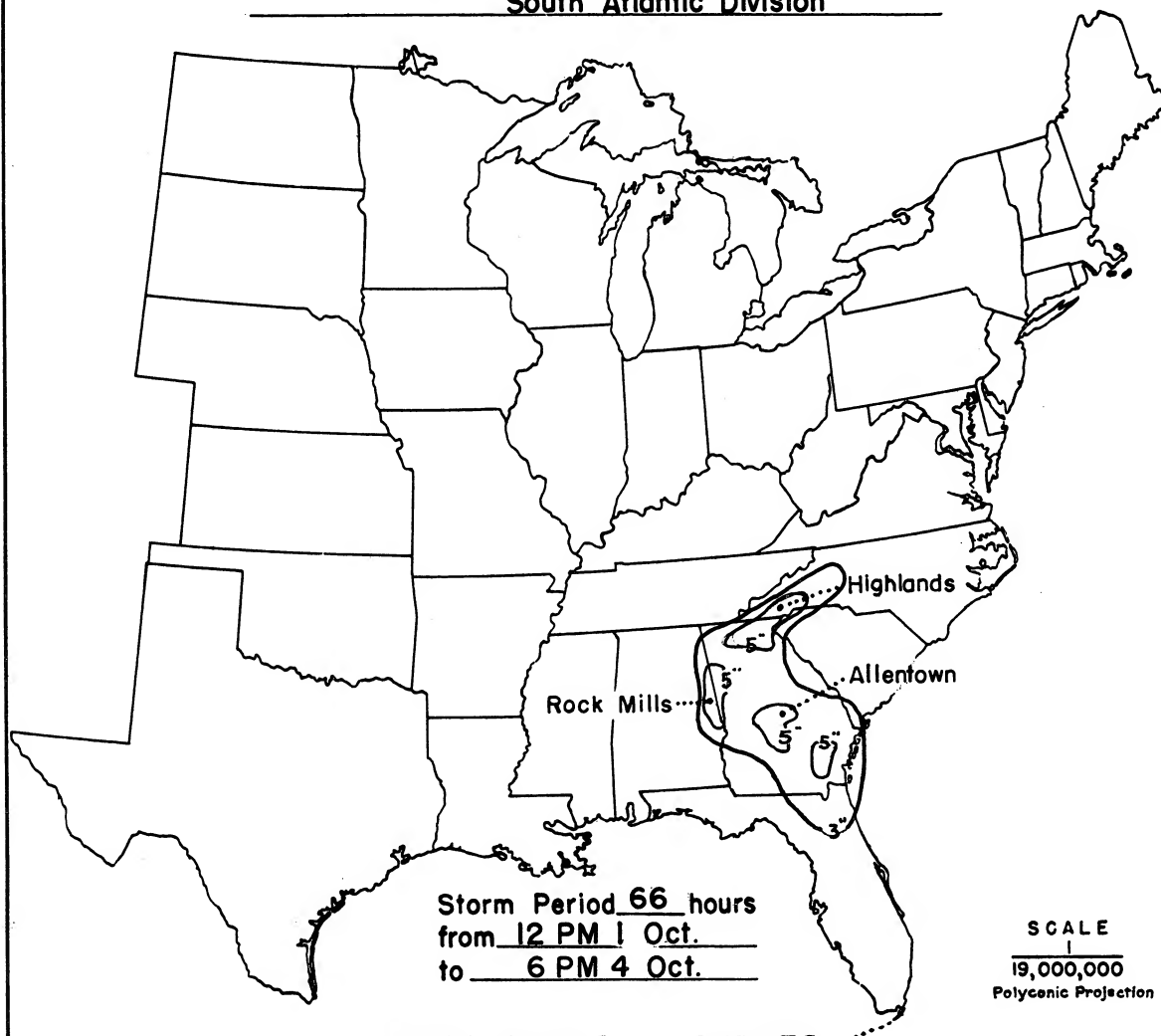
Final isohyetal maps, in 1 sheet, scale 1:1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 3
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 8
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

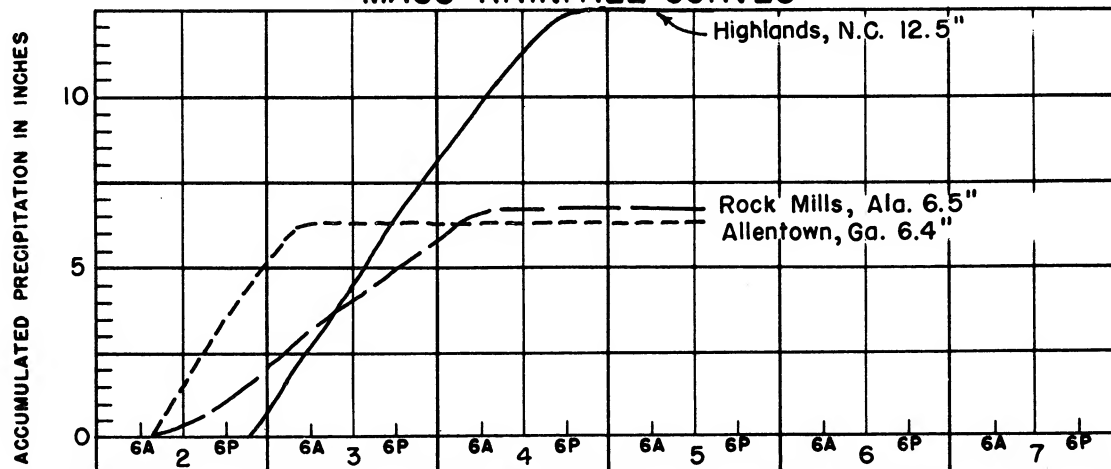
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	66	
10	3.3	4.6	6.3	8.0	9.0	10.2	12.5	12.5	12.5	
100	3.2	4.5	5.8	7.2	8.3	9.6	12.0	12.2	12.2	
200	3.1	4.5	5.7	6.9	8.0	9.3	11.6	11.8	11.8	
500	3.0	4.4	5.4	6.4	7.4	8.7	10.9	11.0	11.0	
1,000	2.8	4.2	5.1	5.9	6.8	8.0	10.0	10.1	10.1	
2,000	2.5	3.8	4.8	5.5	6.2	7.2	9.0	9.1	9.1	
5,000	2.0	3.2	4.3	4.8	5.3	6.1	7.5	7.8	7.8	
10,000	1.6	2.7	3.9	4.3	4.6	5.3	6.5	6.9	6.9	
20,000	1.2	2.2	3.3	3.7	3.9	4.4	5.6	6.0	6.0	
50,000	0.7	1.3	1.9	2.5	2.9	3.4	4.3	4.8	4.8	
60,000	0.6	1.1	1.6	2.2	2.7	3.2	4.0	4.6	4.6	

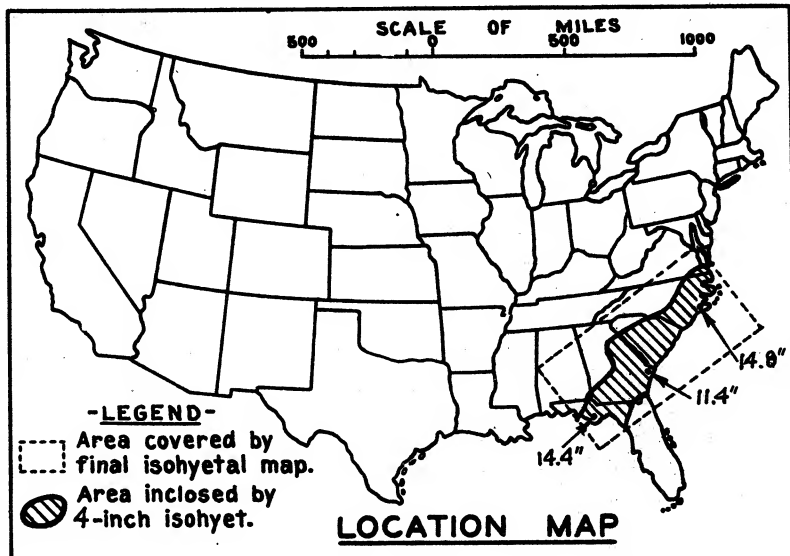
STORM STUDIES - ISOHYETAL MAP

Storm of 2-4 October 1898 Assignment SA 3-7
Study Prepared by: Savannah, Georgia District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 13-17, 1924

Assignment SA 3 - 16

Location Eastern Georgia, Fla.,

Study Prepared by: N.C., & S.C.

South Atlantic Division

Savannah District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/5/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/22/44

Remarks: Centers at

Beaufort, N.C.,

Mt. Pleasant, Fla., &

Savannah, Ga.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 19

Form 5001-B (24-hour " ")----- 40

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- 1

Form 5002 (Mass rainfall curves)----- 42

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 4

Form S-11 (Depth-area data from isohyetal map)----- 2

Form S-12 (Maximum depth-duration data)----- 12

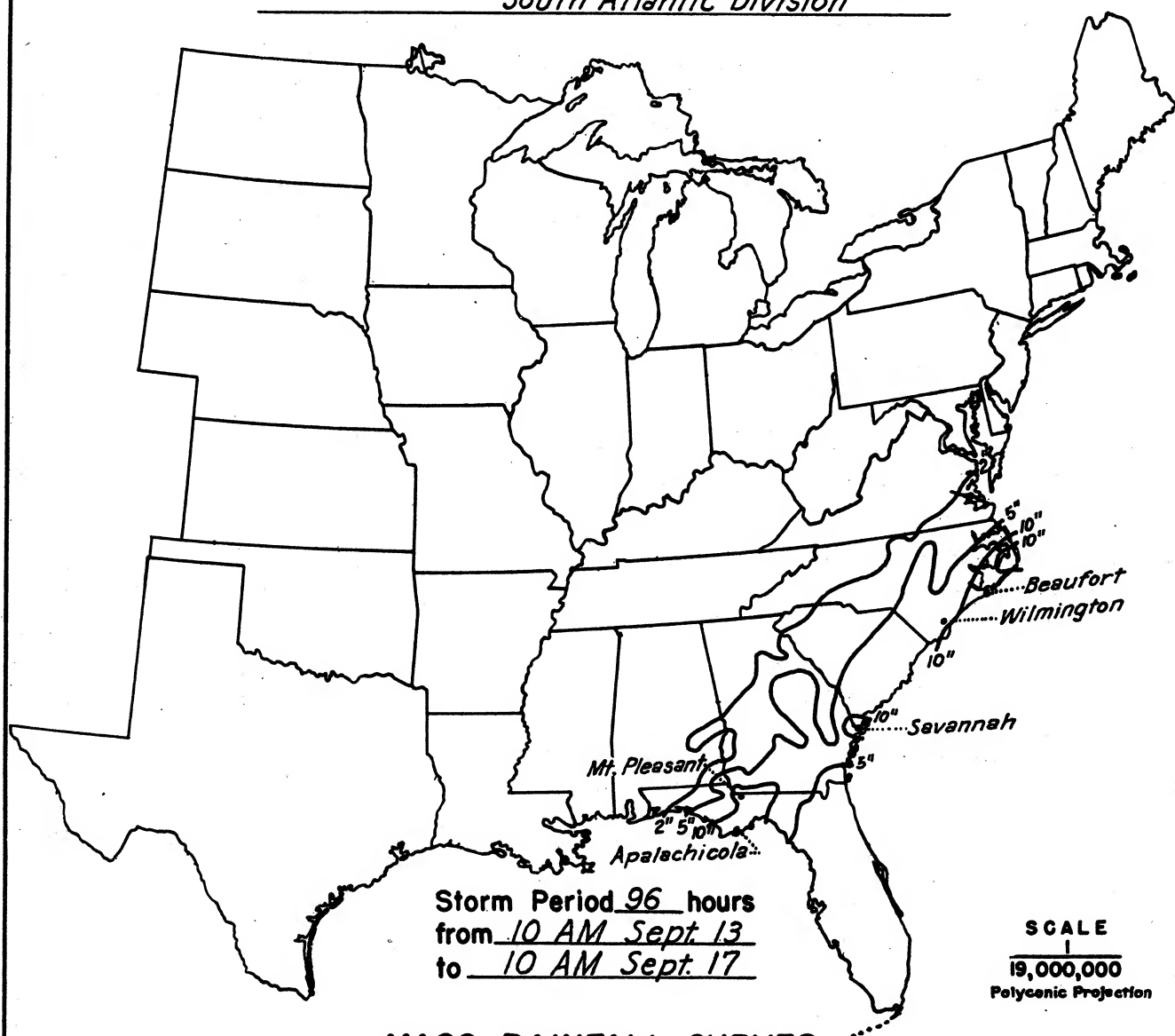
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 2

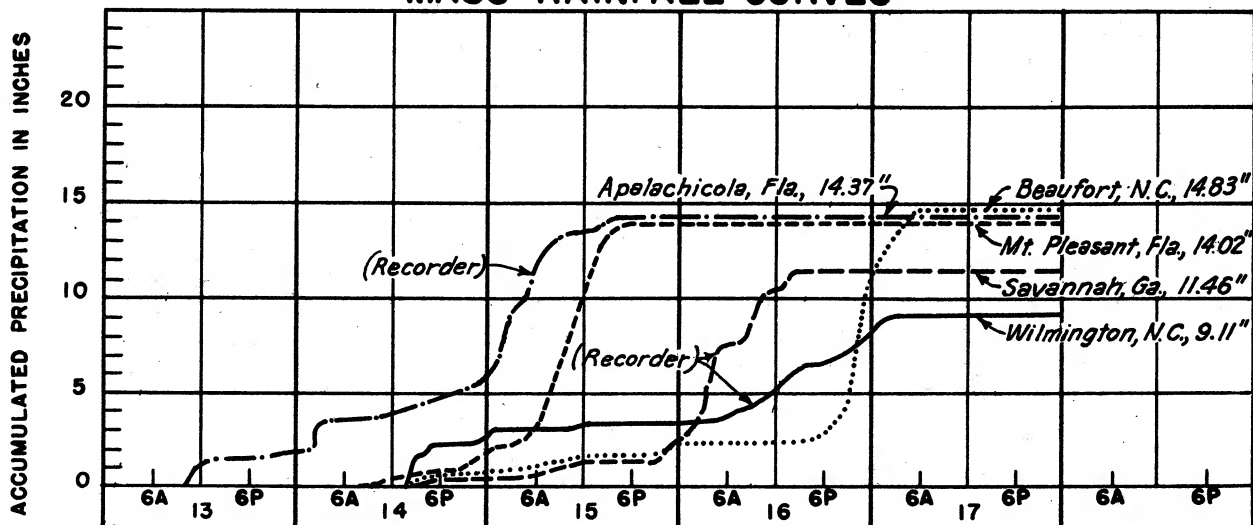
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

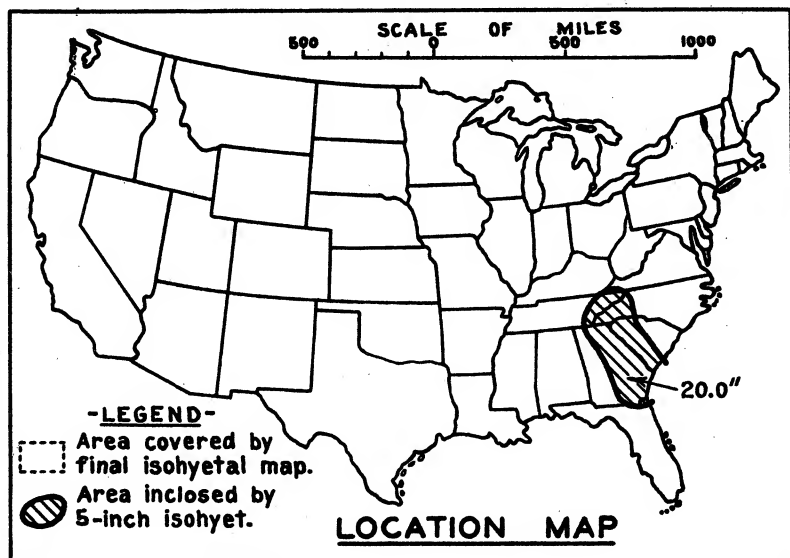
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	
10	9.6	11.8	12.5	13.2	13.5	13.9	14.0	14.4	14.8	14.8	
100	7.7	11.2	12.3	12.9	13.3	13.6	13.7	14.2	14.4	14.4	
200	7.1	11.0	12.1	12.6	13.1	13.3	13.5	14.0	14.2	14.2	
500	6.2	10.5	11.5	12.1	12.5	12.7	12.9	13.7	13.8	13.8	
1,000	5.5	9.5	10.9	11.5	11.9	12.2	12.4	13.2	13.4	13.4	
2,000	4.8	8.2	9.9	10.7	11.2	11.4	11.7	12.4	12.7	12.7	
5,000	3.7	6.4	8.2	9.4	9.8	10.1	10.6	11.2	11.6	11.7	
10,000	2.8	5.0	6.7	8.1	8.6	9.0	9.6	10.1	10.6	10.8	
20,000	2.0	3.8	5.1	6.3	6.9	7.5	8.3	8.9	9.4	9.8	
50,000	1.2	2.3	3.2	4.0	4.6	5.1	6.1	7.1	7.5	8.1	
100,000	0.7	1.3	1.9	2.4	2.9	3.3	4.3	5.6	6.0	6.4	

STORM STUDIES - ISOHYETAL MAP

Storm of September 13-17, 1924 Assignment SA 3-16Study Prepared by: Savannah, Ga. District
South Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 23-28 1929

Assignment SA 3-20

Location Eastern Georgia

Study Prepared by:

South Atlantic Division

Savannah District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5/27/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/13/43Remarks: Centers at
Washington, Ga. and
Glennville, Ga.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	18
Form 5001-B (24-hour " ")-----	50
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	2
Form 5002 (Mass rainfall curves)-----	50

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

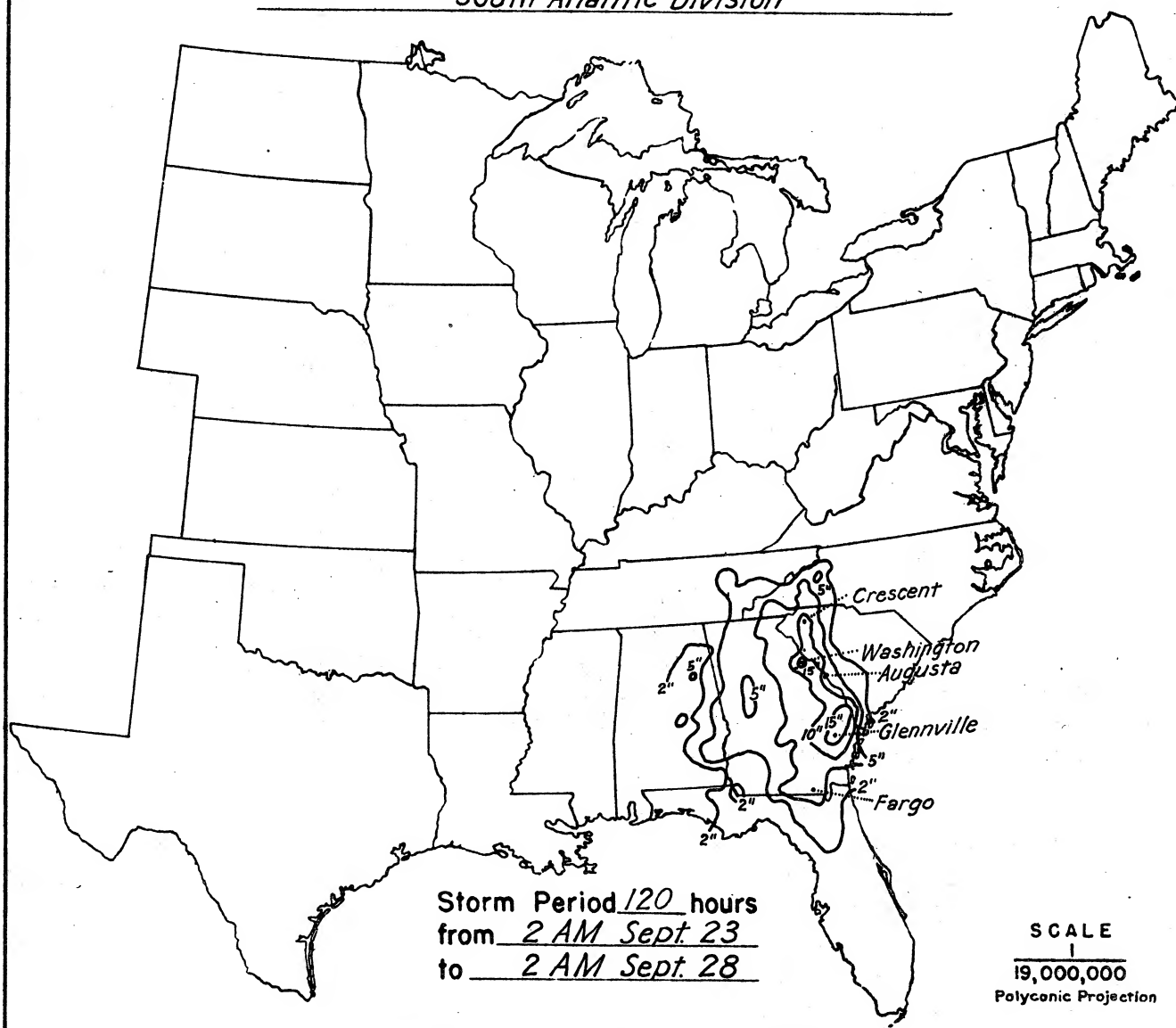
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

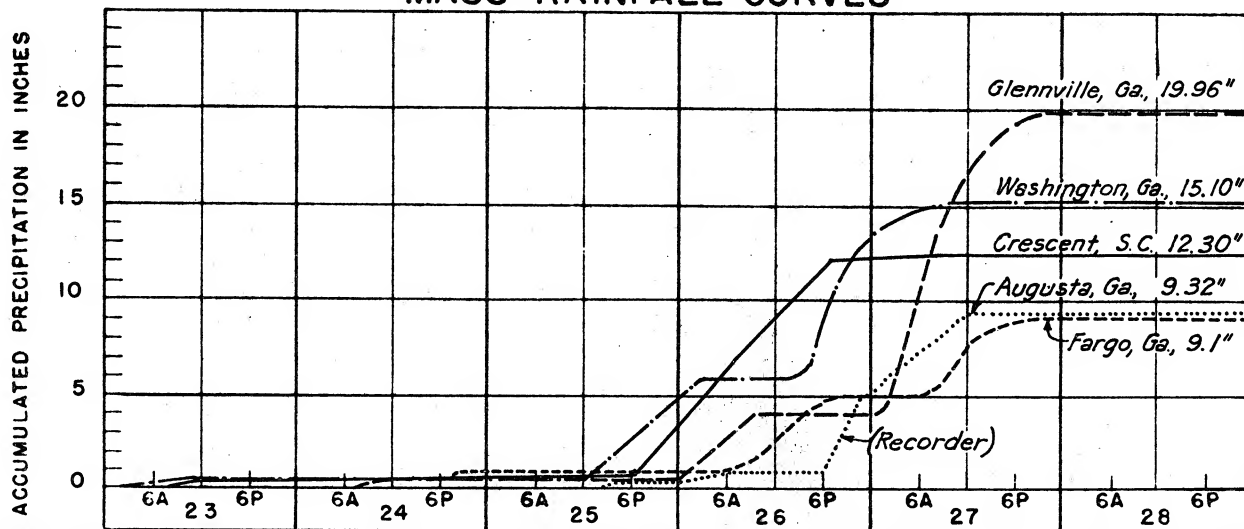
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

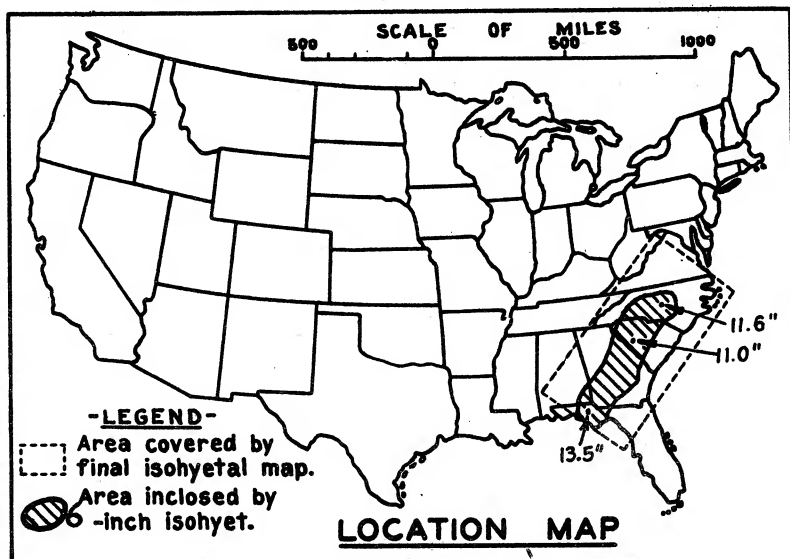
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	8.4	12.9	15.3	16.0	16.0	16.4	19.0	19.6	19.6	20.0	20.0
100	8.1	12.4	14.1	15.1	15.6	16.3	18.4	19.2	19.3	19.7	19.7
200	7.9	12.1	13.7	14.6	15.3	16.1	18.1	18.9	19.0	19.6	19.6
500	7.5	11.6	12.9	13.9	14.7	15.9	17.3	18.5	18.7	19.1	19.1
1,000	7.1	10.9	12.2	13.1	14.0	15.3	16.5	17.8	18.0	18.2	18.2
2,000	6.5	10.0	11.3	12.1	12.9	14.1	15.3	16.3	16.5	16.8	16.8
5,000	5.2	7.8	9.1	9.8	10.6	11.8	13.4	14.2	14.3	14.6	14.7
10,000	3.7	5.6	6.9	7.6	8.5	9.9	11.8	12.5	12.5	12.6	12.7
20,000	2.1	3.6	4.9	5.8	6.7	7.9	9.8	10.5	10.5	10.6	10.7
50,000	1.0	1.9	2.8	3.7	4.5	5.1	6.4	7.0	7.4	7.5	7.7
70,000	0.7	1.5	2.2	3.1	3.8	4.2	5.2	5.7	6.1	6.6	6.7

STORM STUDIES - ISOHYETAL MAP

Storm of September 23-28, 1929 Assignment SA 3-20Study Prepared by: Savannah, Ga. District
South Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 29 - Oct. 3, 1929

Assignment SA 3 - 23

Location N.C., S.C., Ga. Fla.

Study Prepared by:

South Atlantic Division

Savannah District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/23/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/19/44

Remarks: Centers at

Vernon, Fla., Moncuro, N.C.
and Saluda, S.C.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	20
Form 5001-B (24-hour " ")-----	52
Form 5001-D (" " " ")-----	0
Misc. precip. records, meteorological data, etc.-----	2
Form 5002 (Mass rainfall curves)-----	55

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

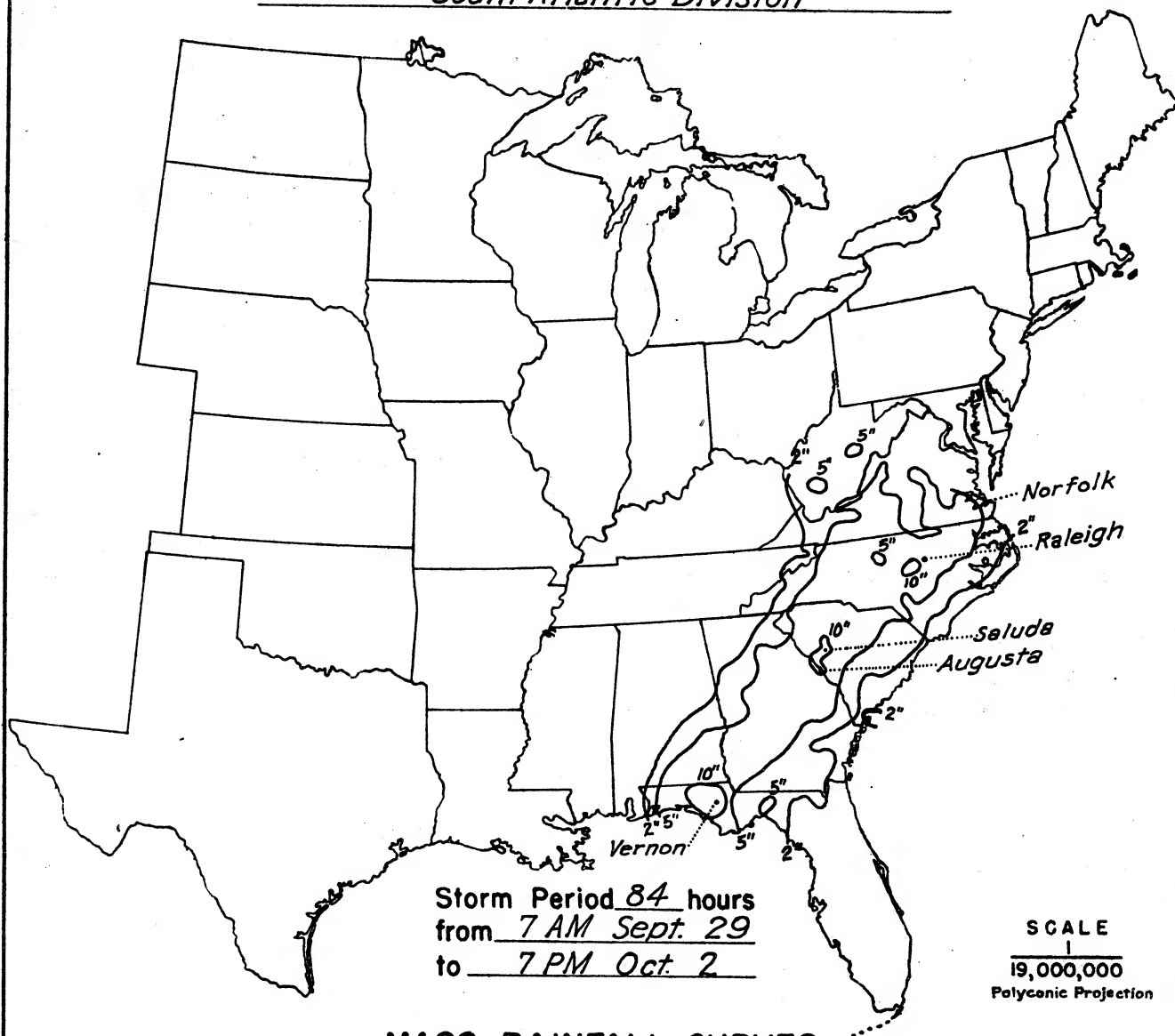
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	7
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

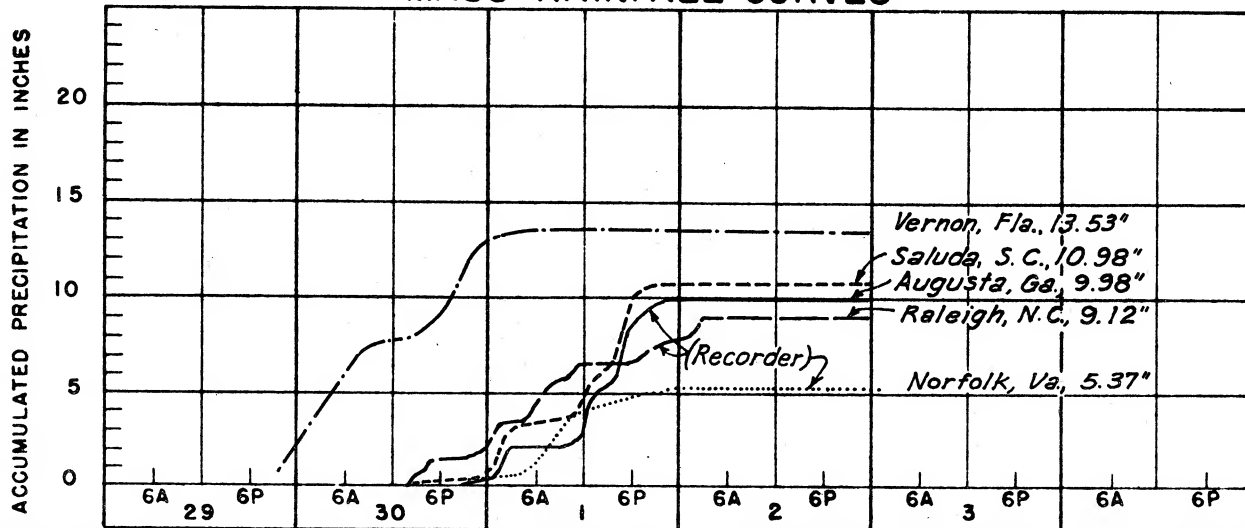
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

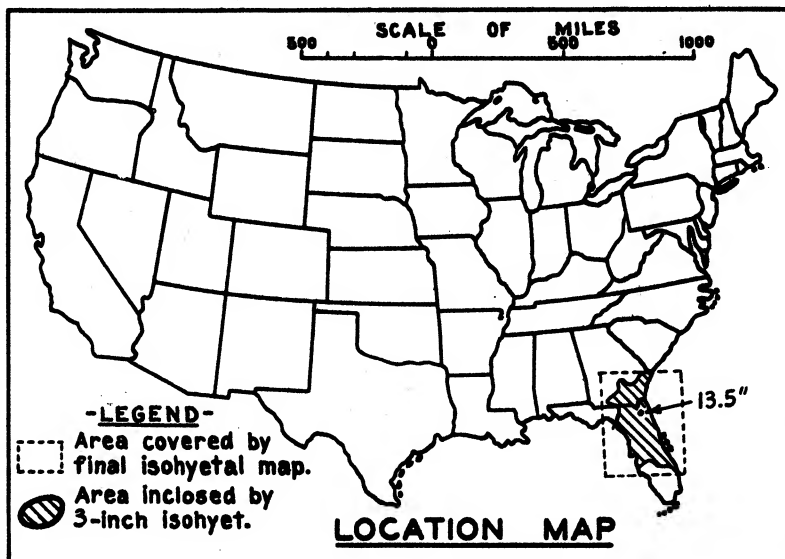
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	84	
10	6.1	7.8	8.9	11.1	13.1	13.5	13.5	13.5	13.5	
100	5.7	7.6	8.5	10.5	12.8	13.5	13.5	13.5	13.5	
200	5.6	7.5	8.3	10.3	12.7	13.4	13.4	13.4	13.4	
500	5.4	7.4	8.2	9.8	12.2	13.1	13.1	13.1	13.1	
1,000	5.2	7.3	7.9	9.3	11.6	12.7	12.7	12.7	12.7	
2,000	4.8	6.7	7.5	8.8	10.8	11.8	11.9	11.9	11.9	
5,000	3.9	5.7	6.7	8.0	9.4	10.2	10.5	10.5	10.5	
10,000	3.3	4.9	6.0	7.2	8.3	9.1	9.5	9.5	9.5	
20,000	2.7	4.1	5.3	6.4	7.3	8.2	8.8	8.9	8.9	
50,000	1.8	3.1	4.2	5.3	6.1	7.2	7.9	8.2	8.2	
70,000	1.5	2.7	3.7	4.8	5.6	6.7	7.4	7.7	7.7	
103,000	1.2	2.2	3.3	4.2	5.0	5.9	6.5	6.8	6.8	

STORM STUDIES - ISOHYETAL MAP

Storm of September 29 - October 3, 1929 Assignment SA 3-23Study Prepared by: Savannah, Ga. District
South Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 21 - 26, 1906
 Assignment SA 4 - 9
 Location Florida and Georgia
 Study Prepared by:
 South Atlantic Division
 Jacksonville District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/20/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 11/30/43
 Remarks: Centers at
 Middleburg, Fla. and
 Clermont, Fla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 9
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 6
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 18

PART II

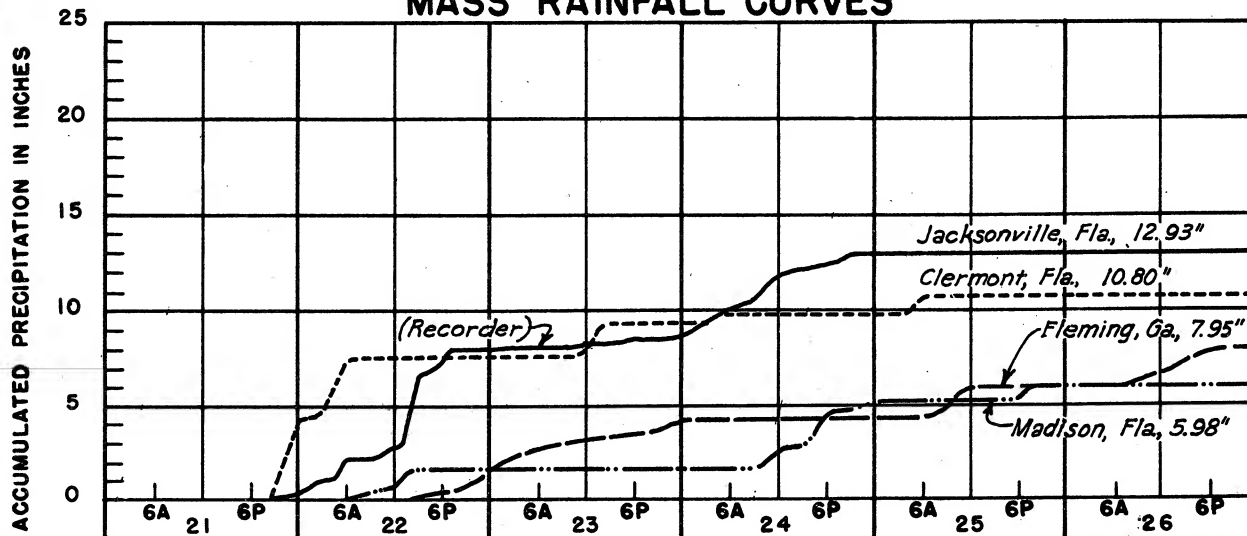
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 4
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 10
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 1

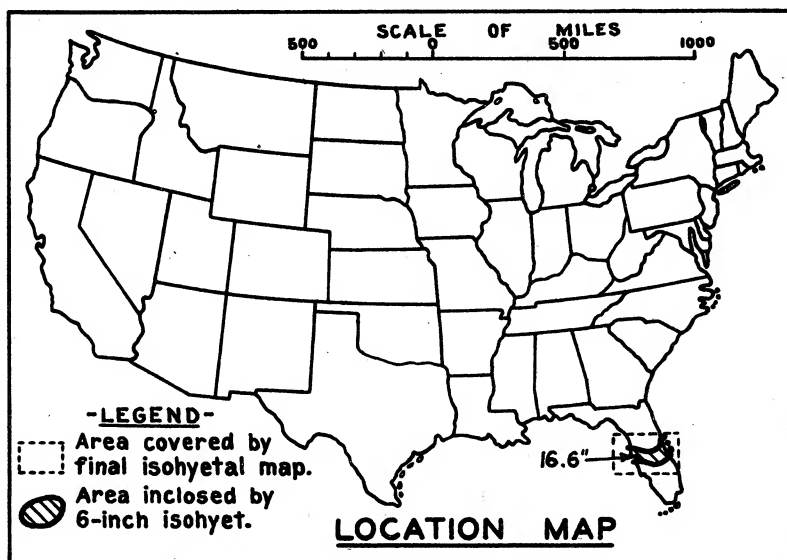
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	5.0	7.3	7.5	7.8	7.9	8.0	9.3	12.5	13.5	13.5	13.5
100	4.1	6.7	6.9	7.1	7.2	7.3	8.7	11.6	13.0	13.2	13.2
200	3.8	6.4	6.6	6.8	6.9	7.0	8.4	11.2	12.8	12.9	12.9
500	3.4	5.8	6.1	6.3	6.5	6.6	8.0	10.6	12.2	12.5	12.5
1,000	3.1	5.2	5.6	5.9	6.1	6.3	7.6	10.0	11.5	11.9	12.0
2,000	2.7	4.6	5.1	5.4	5.6	5.8	7.1	9.3	10.7	11.1	11.3
5,000	2.1	3.6	4.1	4.4	4.7	4.9	6.2	8.0	9.1	9.8	10.0
10,000	1.7	2.8	3.3	3.7	3.9	4.2	5.3	6.8	7.8	8.5	8.8
20,000	1.2	2.1	2.5	2.8	3.1	3.4	4.2	5.4	6.3	7.1	7.4
50,000	0.5	1.0	1.4	1.7	2.0	2.3	2.8	3.6	4.4	5.3	5.6

STORM STUDIES - ISOHYETAL MAP

Storm of May 21-26, 1906 Assignment SA 4-9
Study Prepared by: Jacksonville, Fla. District
South Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of August 1-3, 1915
 Assignment SA 4-15
 Location Florida
 Study Prepared by:
 South Atlantic Division
 Jacksonville District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/7/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/4/44

Remarks: Centers at
 St. Petersburg, Fla. and
 Merritt Island, Fla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	2
Form 5001-B (24-hour " ")-----	8
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	8

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

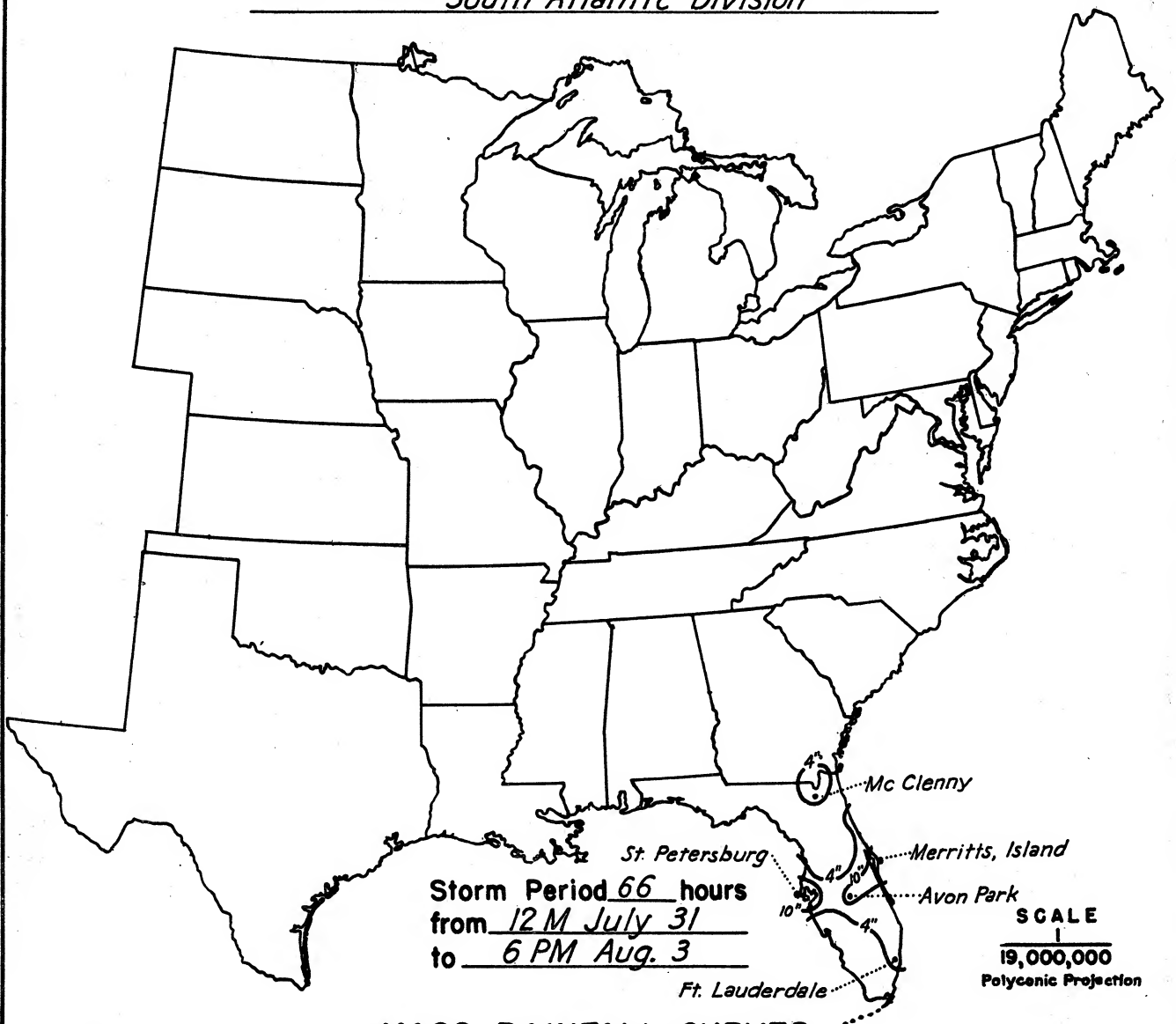
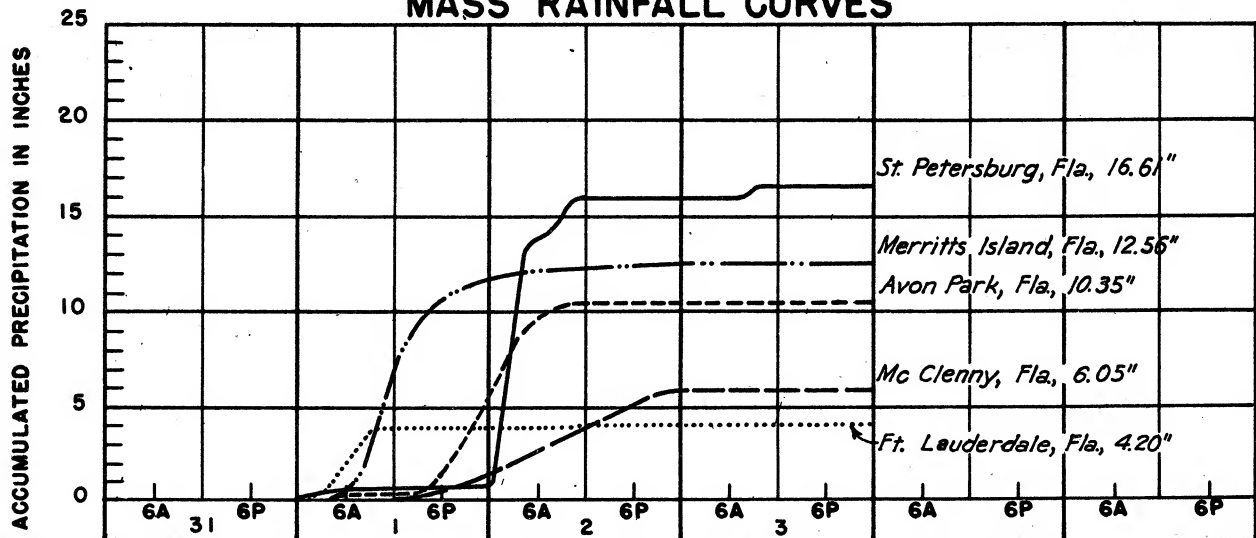
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	(on S-12)

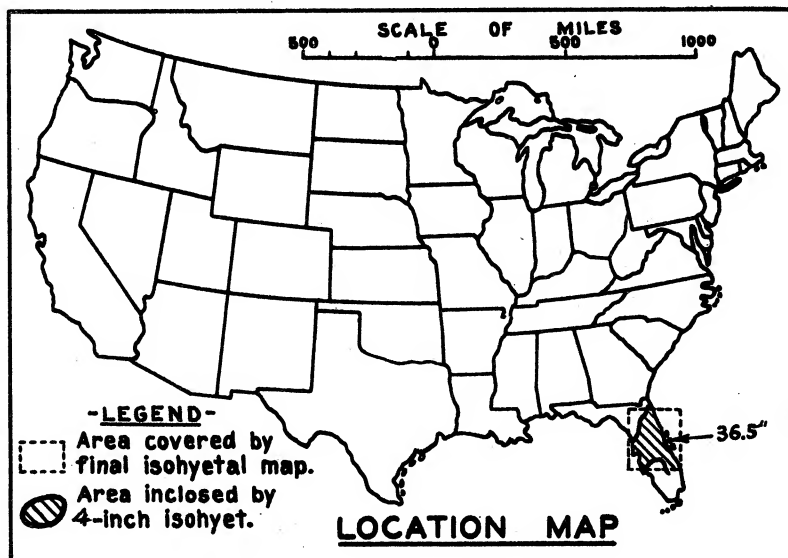
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	66	
10	12.9	14.9	15.4	15.5	15.5	15.5	16.0	16.6	16.6	
100	11.9	13.6	14.2	14.3	14.4	14.5	15.2	15.5	15.5	
200	10.8	12.4	13.1	13.3	13.5	13.7	14.4	14.7	14.7	
500	9.1	10.6	11.5	11.8	12.2	12.5	13.1	13.4	13.4	
1,000	7.7	9.0	10.1	10.7	11.2	11.5	12.0	12.3	12.3	
2,000	6.1	7.4	8.7	9.5	10.2	10.4	10.9	11.1	11.1	
5,000	4.0	5.2	6.8	7.9	8.7	9.0	9.3	9.5	9.5	
10,000	2.4	3.4	5.2	6.7	7.6	7.8	8.1	8.3	8.3	

STORM STUDIES - ISOHYETAL MAP

Storm of August 1-3, 1915 Assignment SA 4-15
Study Prepared by: Jacksonville, Fla. District
South Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of October 4 - 11, 1924

Assignment SA 4 - 20

Location Florida

Study Prepared by:

South Atlantic Division

Jacksonville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/22/41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/20/45

Remarks: Center at

New Smyrna, Fla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	13
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	9

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

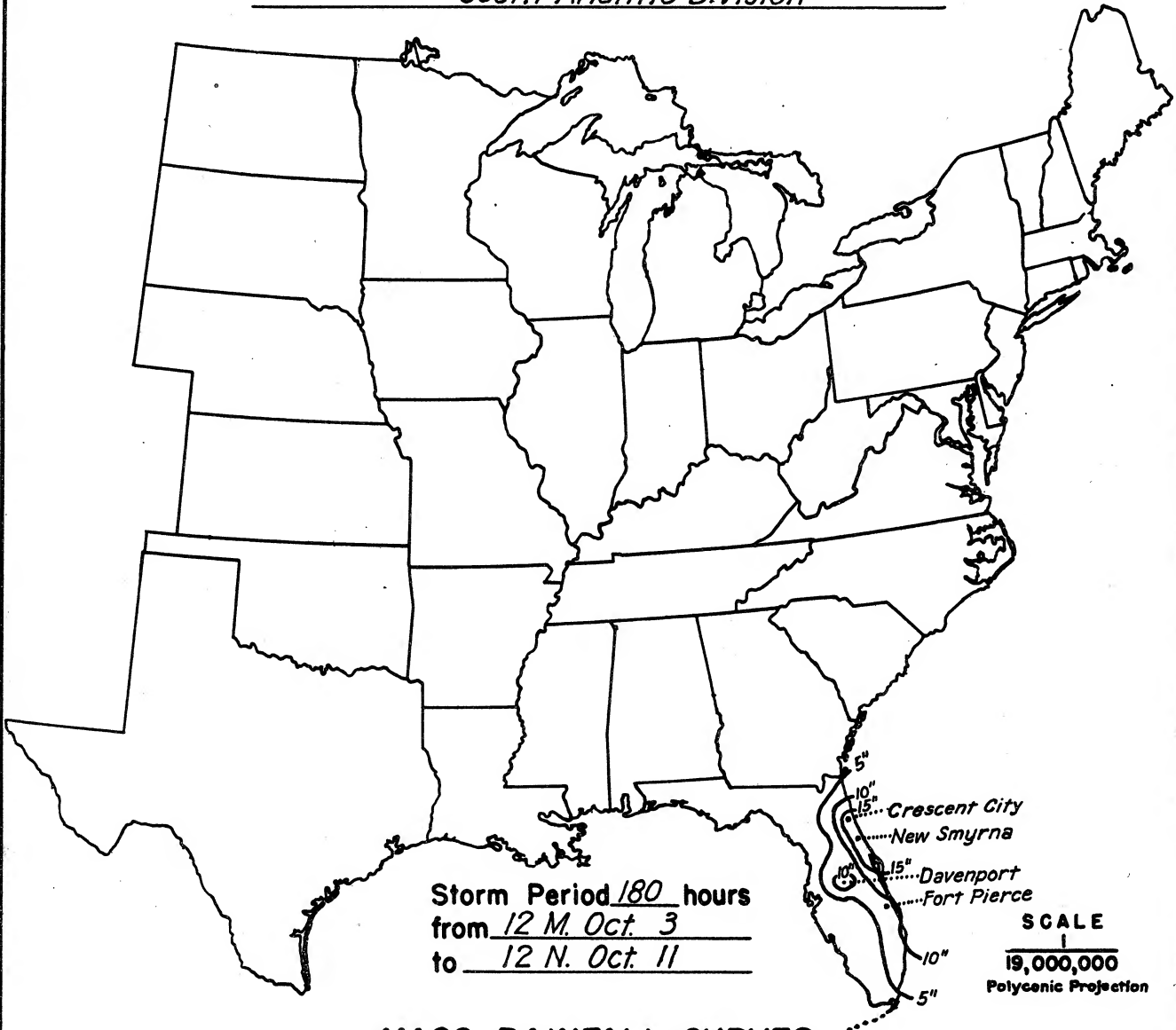
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

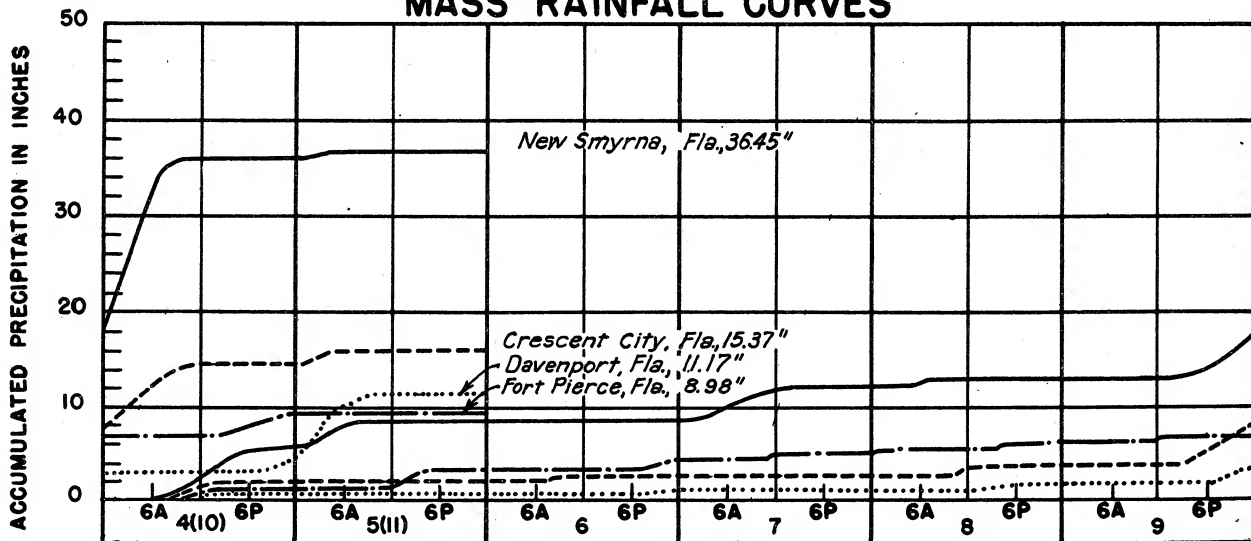
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	72	96	120	144	180
10	13.6	19.3	22.3	23.2	23.3	23.8	24.2	27.4	27.9	33.6	36.5
100	12.8	18.1	20.9	21.8	21.9	22.3	22.7	25.7	26.2	31.5	34.2
200	12.2	17.3	20.0	20.8	20.9	21.2	21.6	24.5	25.0	30.0	32.6
500	10.5	14.4	16.9	17.8	18.2	19.0	19.4	21.5	22.3	25.9	28.8
1,000	8.8	11.7	13.9	14.9	15.7	16.8	17.2	18.7	19.7	22.3	25.1
2,000	6.7	8.9	10.9	11.9	13.0	14.3	14.7	15.8	16.9	18.8	21.3
5,000	3.6	5.2	6.8	7.7	9.2	10.6	11.0	11.7	13.0	14.0	16.1
10,000	1.1	2.4	3.6	4.5	6.2	7.7	8.2	8.5	9.8	10.5	12.2

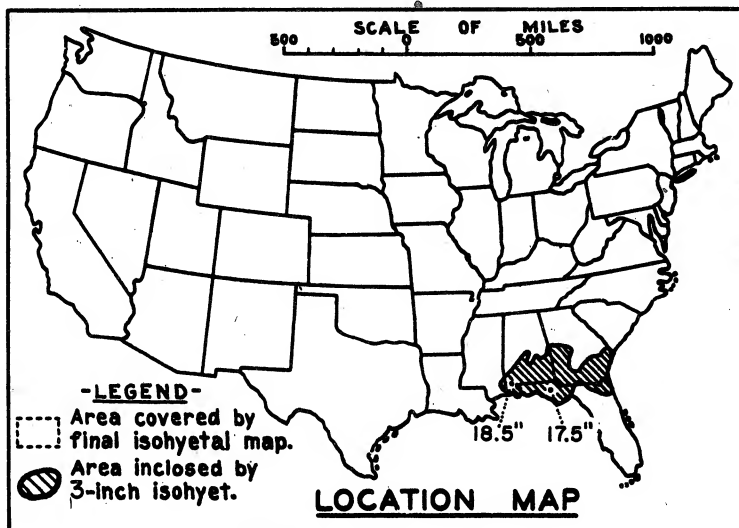
STORM STUDIES - ISOHYETAL MAP

Storm of October 4-11, 1924 Assignment SA 4-20
Study Prepared by: Jacksonville, Fla. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 17-21 Sept. 1926

Assignment SA 4-23

Location Ga.-Fla.-Ala.

Study Prepared by:

South Atlantic Division
Jacksonville District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 5/8/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/10/47Remarks: Centers at
Bay Minette, Ala. and
Blountstown, Fla.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	<u>11</u>
Form 5001-B (24-hour " ")-----	<u>26</u>
Form 5001-D (" " " ")-----	<u>—</u>
Misc. precip. records, meteorological data, etc.-----	<u>—</u>
Form 5002 (Mass rainfall curves)-----	<u>30</u>

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

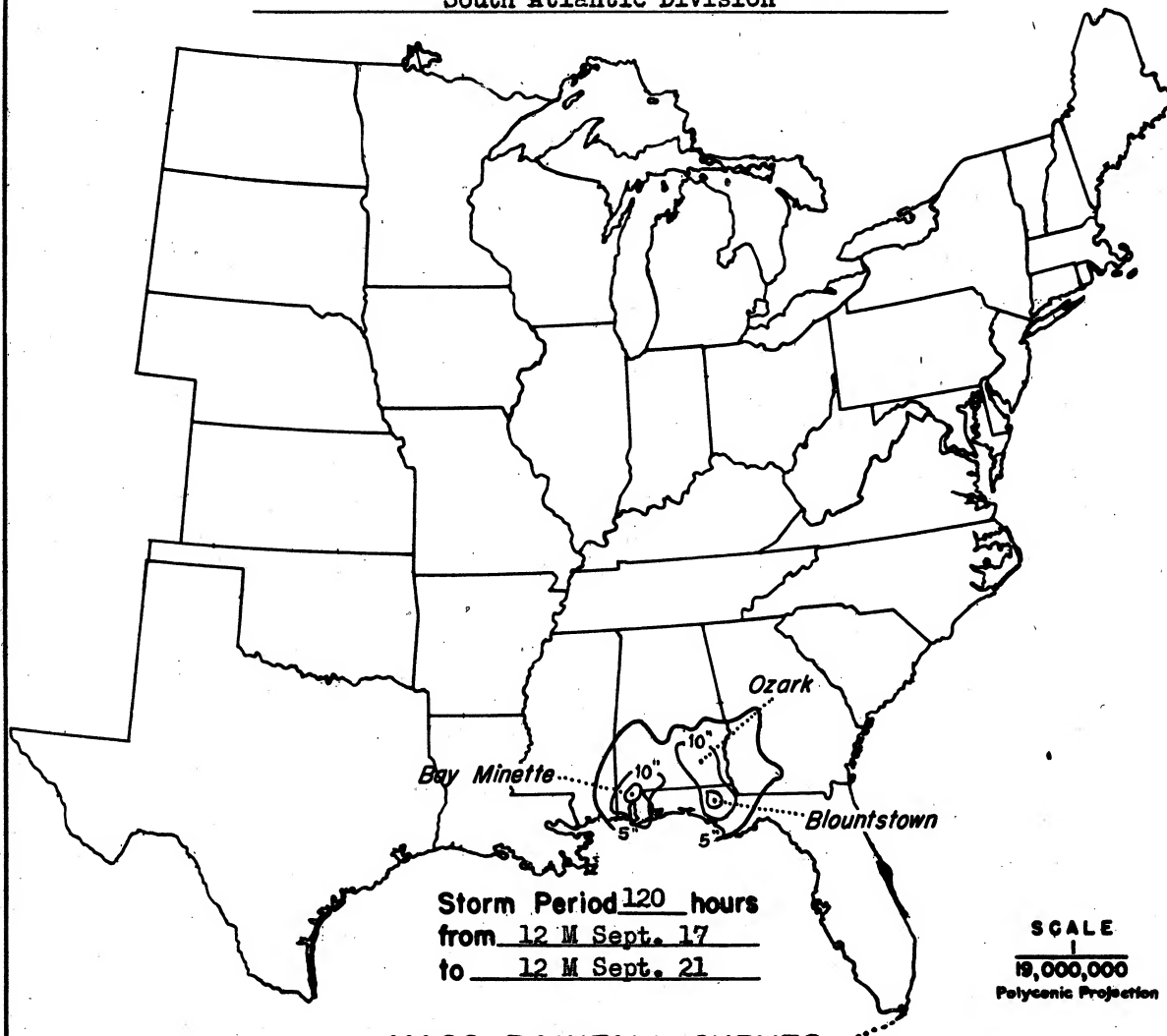
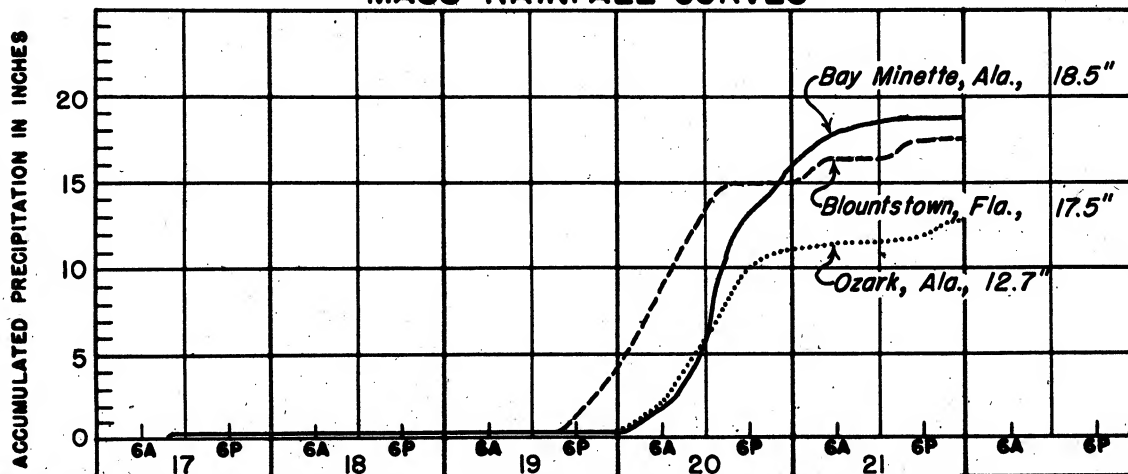
Form S-10 (Data from mass rainfall curves)-----	<u>2</u>
Form S-11 (Depth-area data from isohyetal map)-----	<u>2</u>
Form S-12 (Maximum depth-duration data)-----	<u>4</u>
Maximum duration-depth-area curves-----	<u>1</u>
Data relating to periods of maximum rainfall-----	<u>1</u>

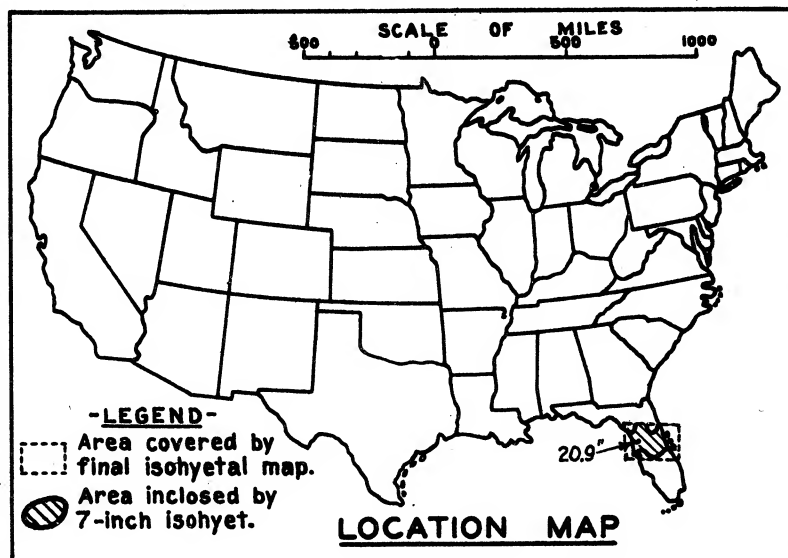
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	8.5	12.0	15.5	17.2	17.9	18.3	18.5	18.5	18.5	18.5	18.5
100	8.2	11.7	15.0	16.7	17.4	17.8	18.0	18.0	18.0	18.0	18.0
200	7.7	11.2	14.6	16.1	16.7	17.3	17.6	17.6	17.6	17.6	17.6
500	7.1	10.3	13.6	14.8	15.8	16.2	16.5	16.5	16.5	16.5	16.5
1,000	6.4	9.5	12.6	13.7	14.6	15.0	15.4	15.4	15.4	15.4	15.4
2,000	5.6	8.6	11.5	12.5	13.5	13.9	14.2	14.2	14.2	14.2	14.3
5,000	4.6	7.5	10.0	11.0	11.9	12.3	12.6	12.7	12.7	12.7	12.8
10,000	3.7	6.6	8.8	9.8	10.7	11.2	11.5	11.6	11.6	11.6	11.8
20,000	2.9	5.6	7.0	8.4	9.4	9.9	10.2	10.3	10.3	10.3	10.5
35,700	2.1	4.0	5.0	6.0	7.0	7.4	7.9	8.1	8.1	8.1	8.3

STORM STUDIES - ISOHYETAL MAP

Storm of September 17-21, 1926 Assignment SA 4-23
Study Prepared by: Jacksonville, Fla. District
South Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of June 12 - 16, 1934

Assignment SA 5 - 1

Location Florida

Study Prepared by:

South Atlantic Division

Jacksonville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 3/23/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/20/44

Remarks: Center at

St. Ieo, Fla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	13
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	13

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

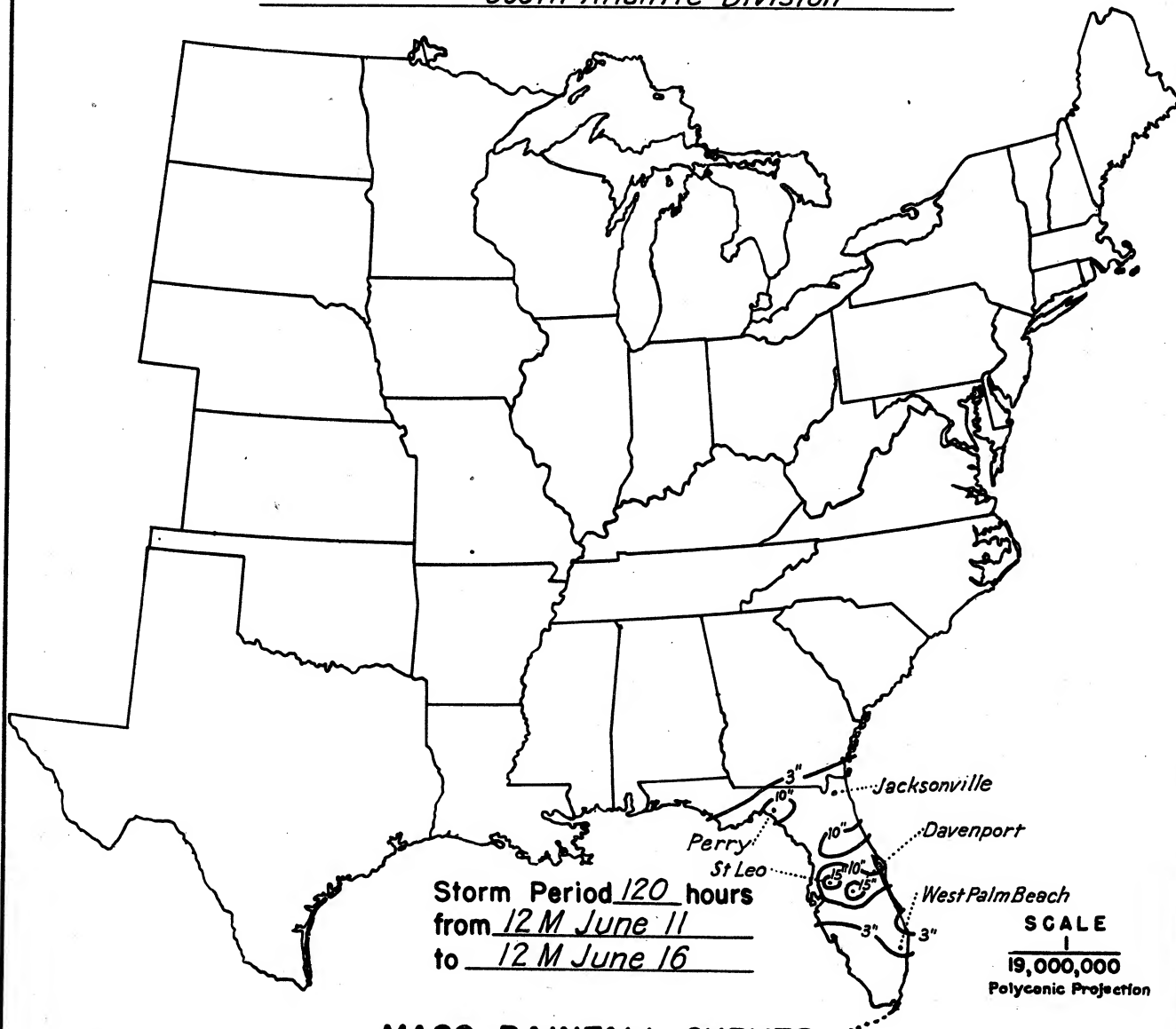
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

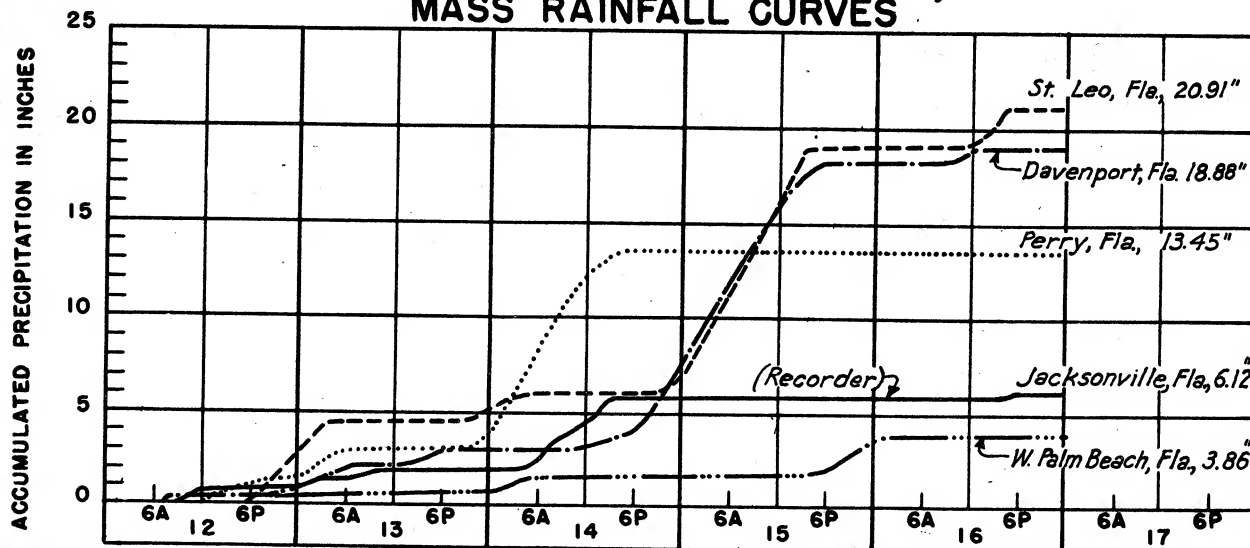
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	5.8	9.4	12.6	14.2	14.9	15.0	15.5	16.2	19.0	20.9	20.9
100	4.9	8.9	12.0	12.7	13.2	13.4	14.2	14.8	18.0	19.7	19.7
200	4.6	8.6	11.5	12.1	12.5	12.8	13.6	14.2	17.4	19.0	19.1
500	4.1	8.0	10.3	11.0	11.5	11.8	12.5	13.1	16.2	17.7	17.8
1,000	3.6	7.2	9.1	9.9	10.6	10.9	11.5	12.1	15.1	16.4	16.5
2,000	3.1	6.2	7.8	8.8	9.5	9.9	10.4	11.1	13.8	14.9	15.1
5,000	2.3	4.7	6.0	7.0	7.9	8.4	9.0	9.6	11.8	12.8	13.1
10,000	1.7	3.4	4.6	5.6	6.6	7.2	7.8	8.5	10.2	11.1	11.4
20,000	1.1	2.1	3.1	4.2	5.4	6.0	6.6	7.3	8.7	9.4	9.8

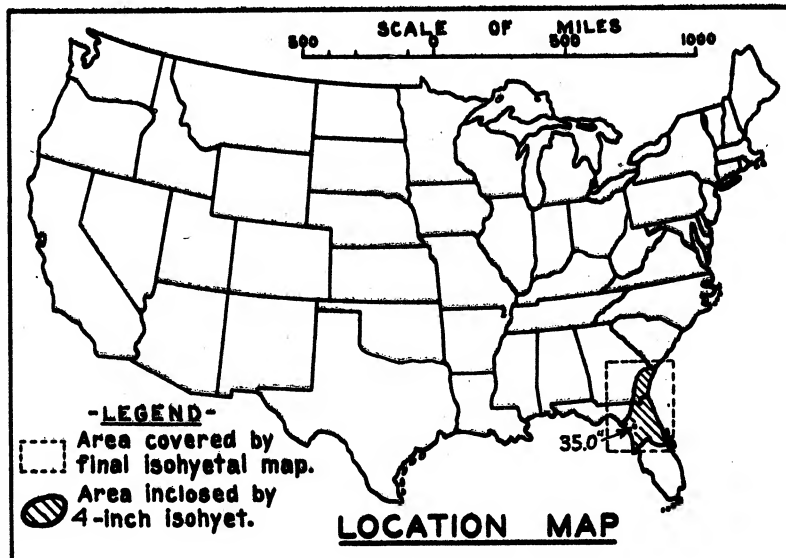
STORM STUDIES - ISOHYETAL MAP

Storm of June 12-16, 1934 Assignment SA 5-1
Study Prepared by: Jacksonville, Fla. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 17-22, 1941

Assignment SA 5 - 6

Location Fla. & Ga.

Study Prepared by:

South Atlantic Division

Jacksonville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 9/14/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/22/45Remarks: Center at
Trenton, Fla.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	17
Form 5001-B (24-hour " ")-----	11
Form 5001-D (" " " ")-----	-
Miscl. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	16

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

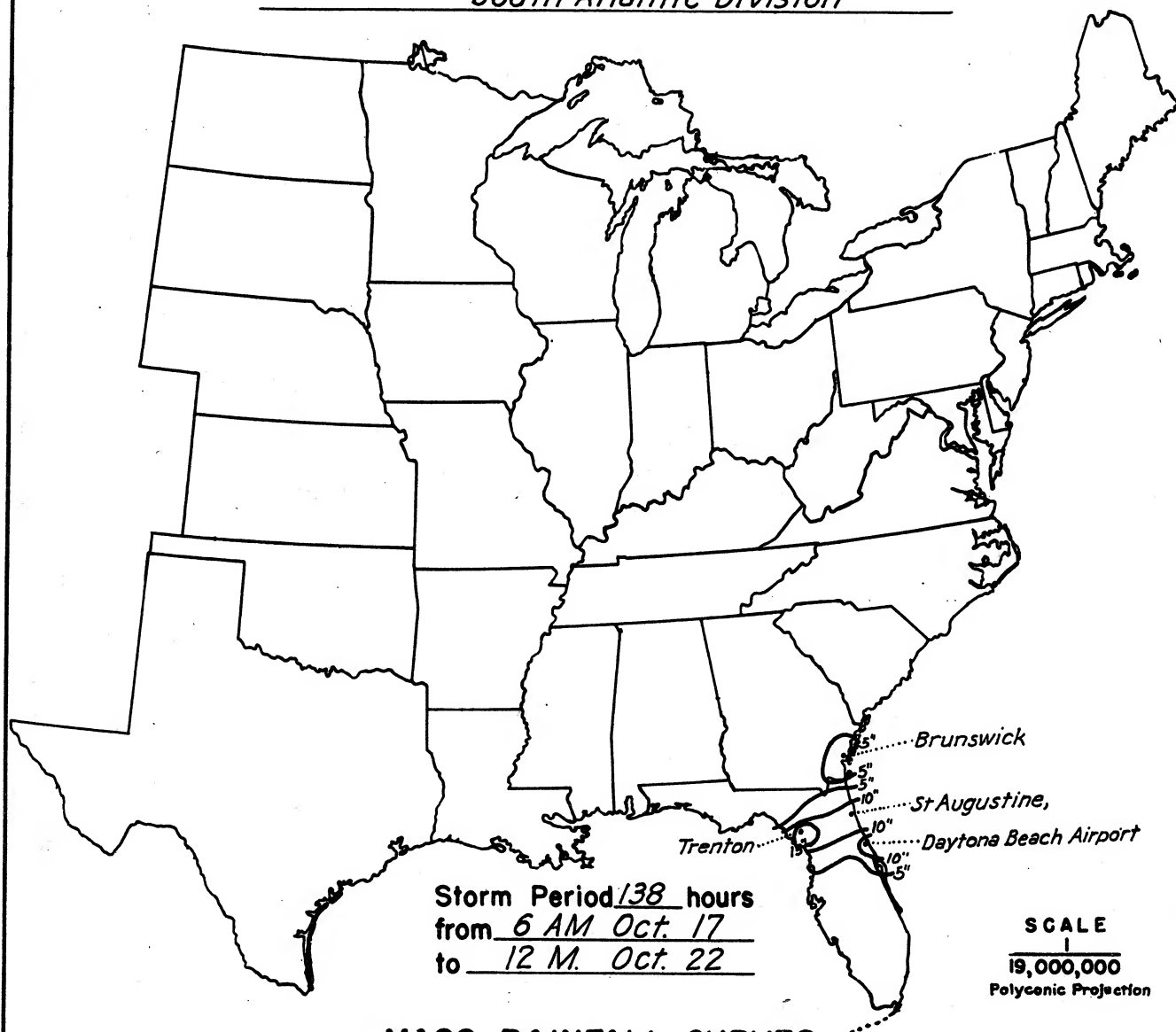
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

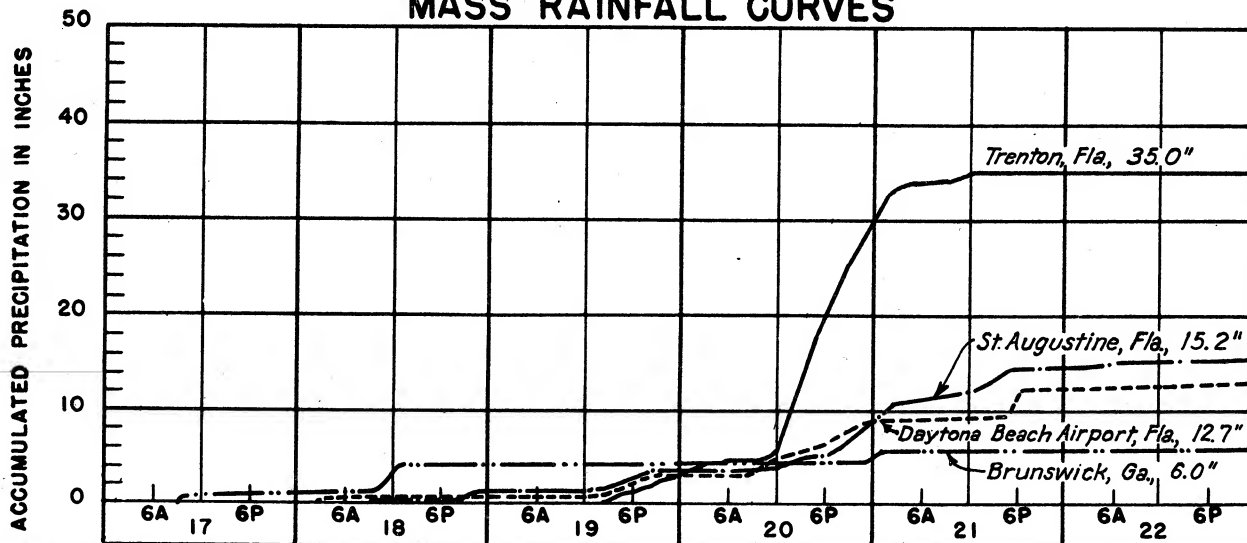
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

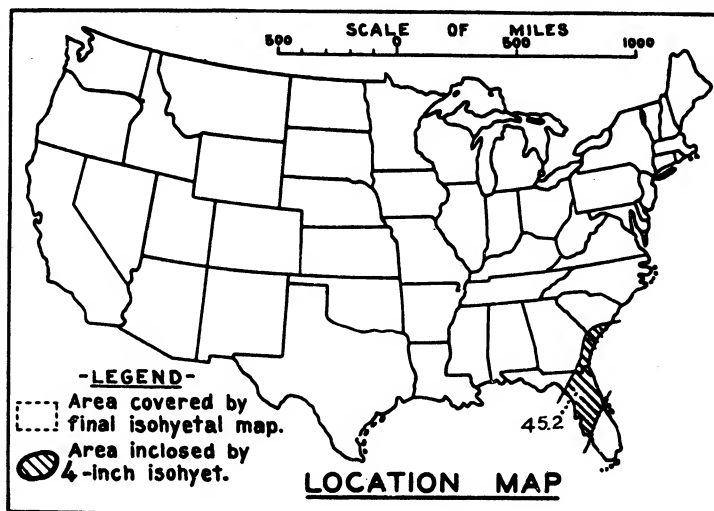
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120/138
10	12.9	23.5	28.8	30.0	31.0	33.0	35.0	35.0	35.0	35.0	35.0
100	10.4	20.3	24.5	26.1	27.3	28.5	30.9	30.9	30.9	30.9	30.9
200	9.6	18.2	22.6	24.4	25.6	26.8	29.0	29.2	29.2	29.2	29.2
500	8.2	15.2	19.4	21.2	22.3	23.5	25.3	25.5	25.6	25.9	25.9
1,000	7.0	12.9	16.6	18.2	19.1	20.3	22.0	22.3	22.4	22.7	22.7
2,000	5.7	10.6	13.7	15.2	16.0	17.0	18.6	19.1	19.2	19.5	19.6
5,000	4.0	7.6	9.9	11.2	11.9	12.7	14.1	14.8	15.0	15.3	15.4
10,000	2.8	5.3	7.0	8.1	8.8	9.5	10.7	11.6	11.8	12.2	12.3
25,000	1.1	2.4	3.2	4.2	4.8	5.3	6.2	7.3	7.6	8.0	8.2

STORM STUDIES - ISOHYETAL MAP

Storm of October 17-22, 1941 Assignment SA 5-6Study Prepared by: Jacksonville, Fla. District
South Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 3-7 September 1950
 Assignment SA 5-8
 Location Florida
 Study Prepared by:
 South Atlantic Division
 Jacksonville District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2/19/53

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/16/57

Remarks: Center at Yankeetown,
 Florida.

Dewpoint 76°, Ref. Pt. 134 SE
 Grid J-8

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:1,000,000 & 1:500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	44
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	14
Misc. precip. records, meteorological data, etc.-----	49
Form 5002 (Mass rainfall curves)-----	33

PART II

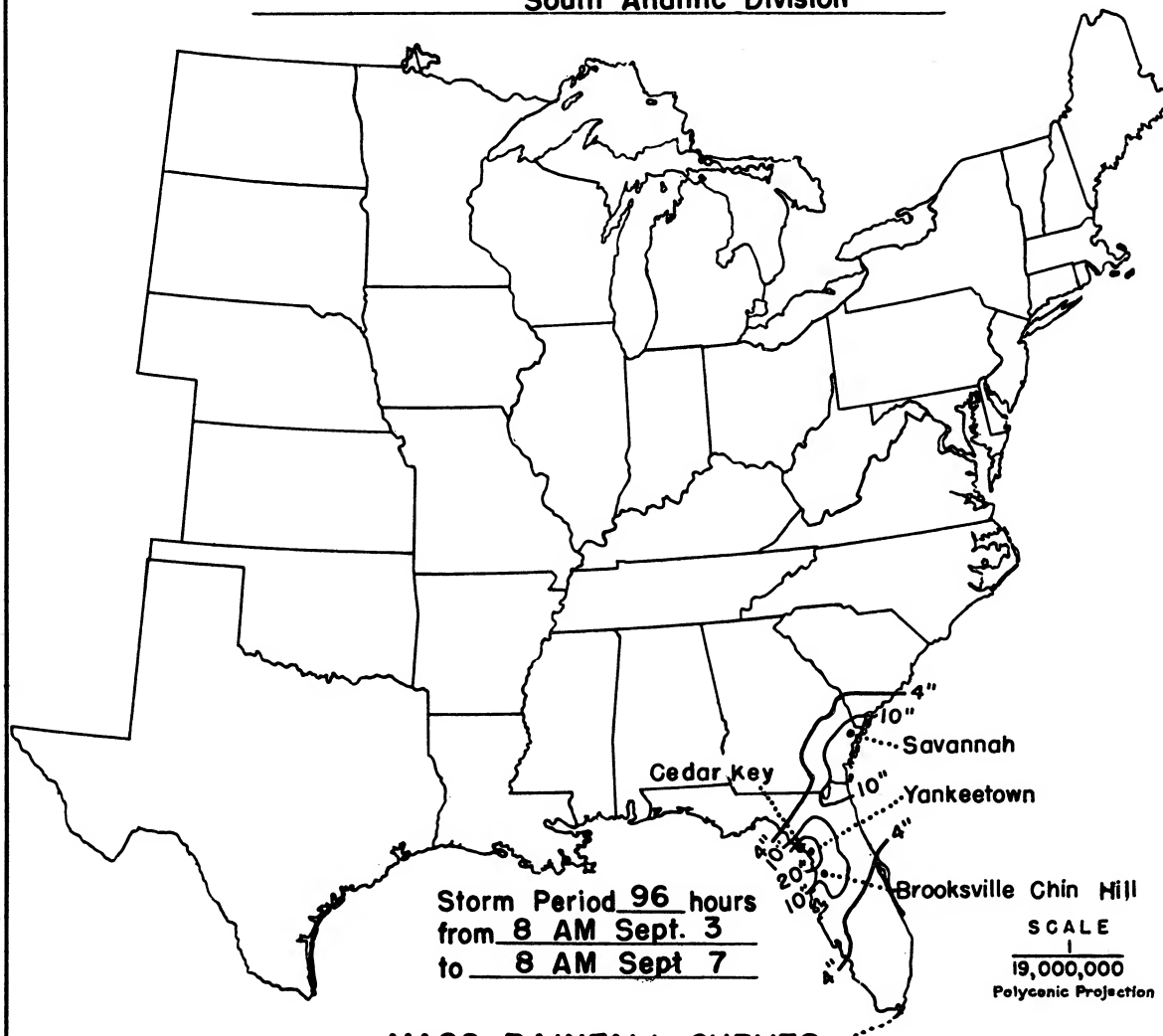
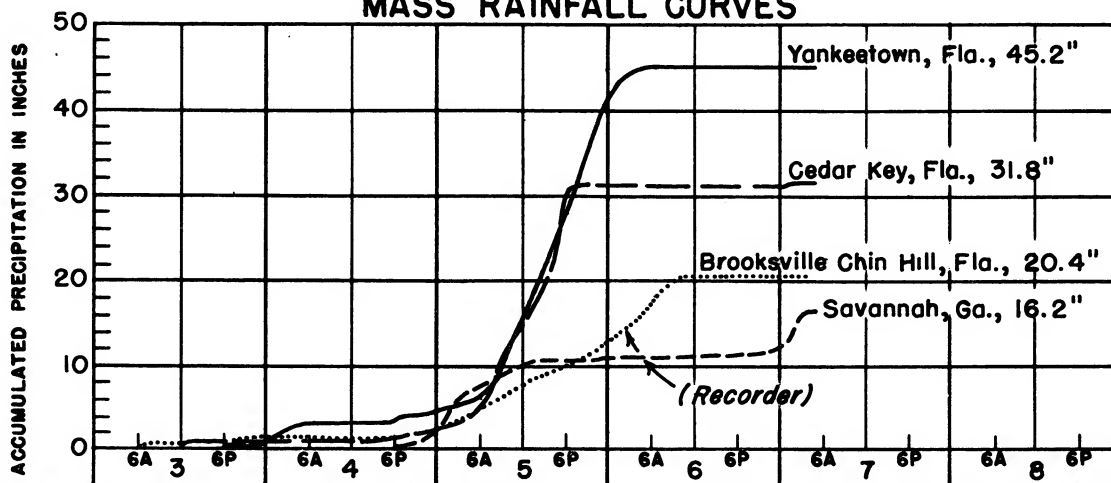
Final isohyetal maps, in 2 sheets, scale 1:1,000,000 & 1:500,000

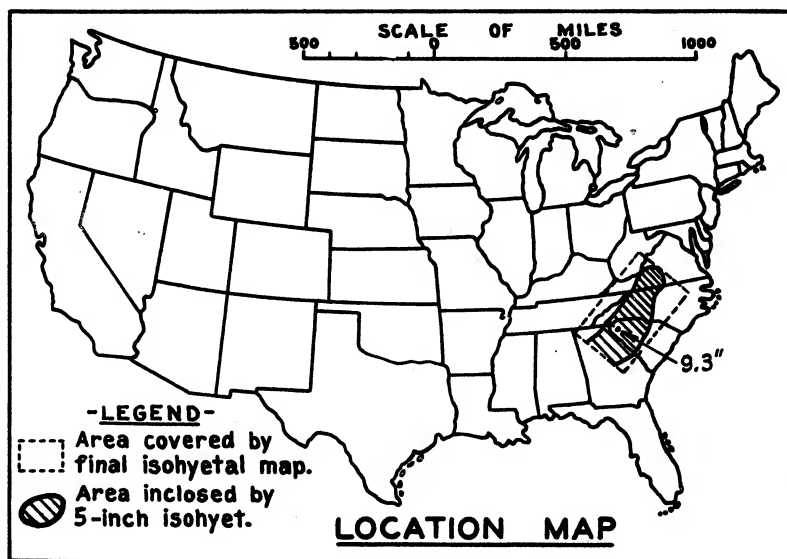
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	4
Form S-12 (Maximum depth-duration data)-----	41
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	16.0	28.6	36.3	38.7	40.6	41.8	43.1	44.7	45.2	45.2
100	14.0	26.3	32.5	35.2	36.5	37.9	38.9	40.2	40.6	40.8
200	13.4	25.6	31.4	34.2	35.3	36.7	37.7	38.8	39.2	39.6
500	12.5	24.6	29.7	32.7	33.6	35.0	36.0	36.9	37.3	37.7
1,000	11.2	22.6	27.4	30.2	31.6	32.9	33.7	34.4	34.9	35.4
2,000	9.4	17.7	22.5	24.8	26.3	27.3	28.4	29.2	29.7	30.5
5,000	5.4	9.7	13.3	15.5	17.5	18.4	19.7	20.2	21.0	21.8
10,000	3.3	6.6	8.6	10.6	12.1	13.1	14.7	15.6	16.4	17.3
20,000	2.3	4.3	5.8	7.5	8.8	9.6	11.2	12.5	13.5	14.2
43,500	1.2	2.3	3.4	4.4	5.3	5.9	7.1	8.2	8.9	9.9

STORM STUDIES - ISOHYETAL MAPStorm of 3-7 September 1950 Assignment SA 5-8Study Prepared by: Jacksonville, Fla., District
South Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of October 15 - 18, 1932
 Assignment SA 5 - 11 (A)
 Location Va., N.C., S.C., & Ga.
 Study Prepared by:

Middle Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/23/40

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/2/44

Remarks: Centers at
 Rock House, N.C. and
 Rocky Mount, Va.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	22
Form 5001-B (24-hour " ")-----	46
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	46

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

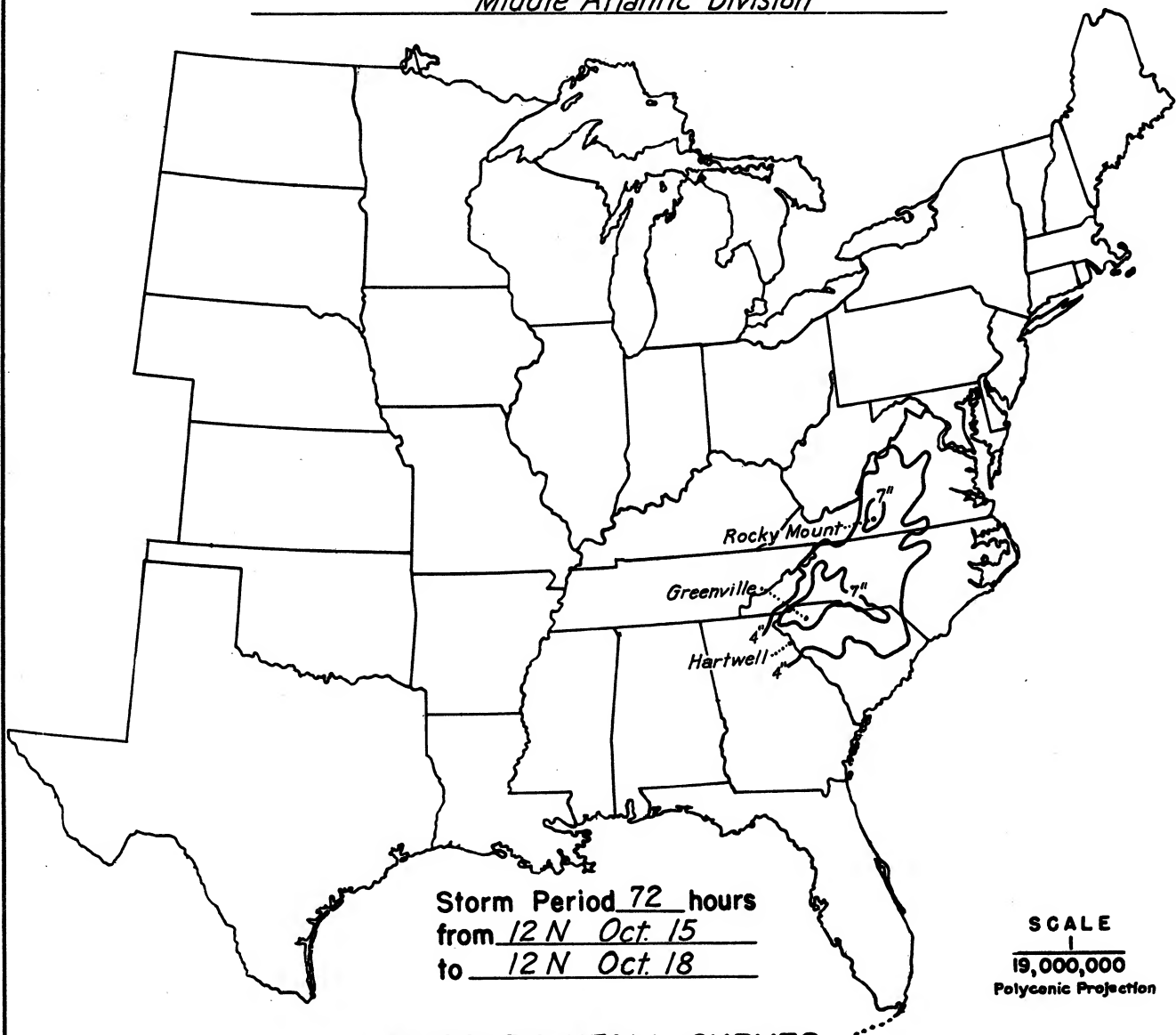
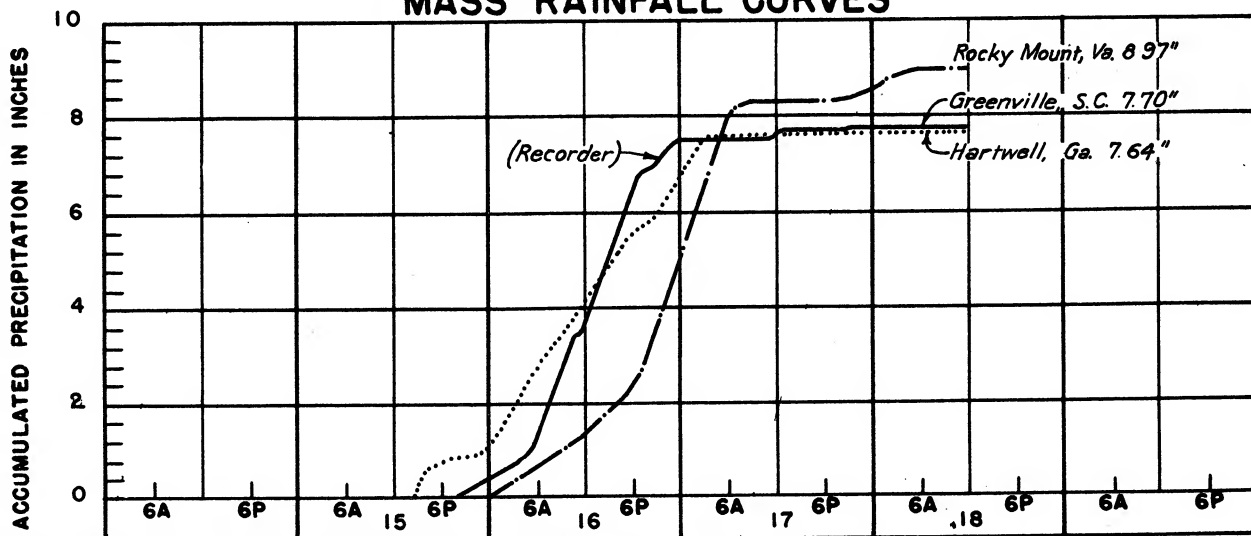
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

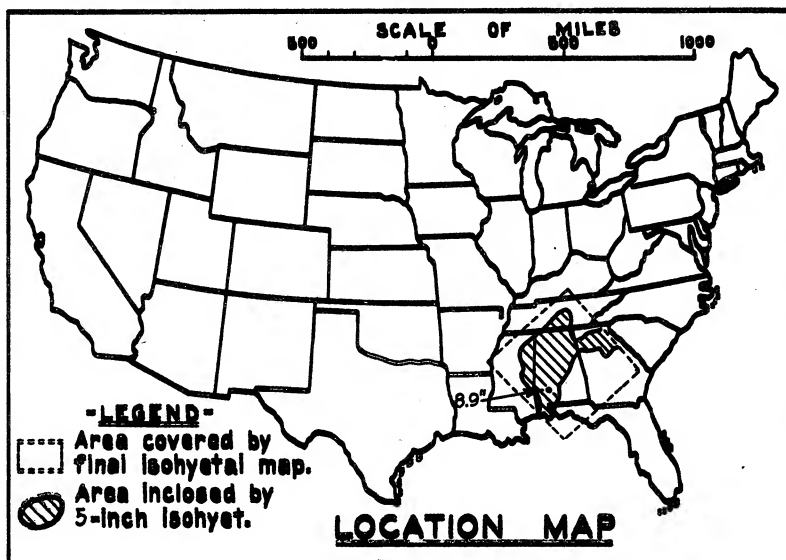
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	3.9	5.8	7.1	8.1	8.8	9.3	9.3	9.3	9.3	
100	3.5	5.4	6.9	7.8	8.5	8.9	8.9	9.0	9.0	
200	3.3	5.3	6.8	7.7	8.4	8.8	8.8	8.8	8.9	
500	3.1	5.1	6.7	7.6	8.3	8.6	8.7	8.7	8.7	
1,000	3.0	5.0	6.5	7.4	8.1	8.4	8.5	8.5	8.5	
2,000	2.8	4.8	6.3	7.2	7.9	8.2	8.3	8.3	8.3	
5,000	2.5	4.5	5.9	6.9	7.5	7.8	7.9	7.9	8.0	
10,000	2.3	4.1	5.5	6.4	7.1	7.4	7.5	7.5	7.5	
20,000	1.9	3.6	4.9	5.8	6.5	6.8	6.9	7.0	7.0	
50,000	1.3	2.5	3.5	4.4	5.0	5.4	5.6	5.8	5.8	

STORM STUDIES - ISOHYETAL MAP

Storm of October 15-18, 1932 Assignment SA 5-11 (A)
Study Prepared by: Norfolk, Virginia District
Middle Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of October 14 - 18, 1932
 Assignment SA 5 - 11 (B)
 Location Ga., Ala., Miss., Tenn.
 Study Prepared by:

Middle Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/23/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/2/44

Remarks: Centers at
 Tuscaloosa, Ala.,
 Mentone, Ala.,
 Citronelle, Ala.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	22
Form 5001-B (24-hour " ")-----	46
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	46

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

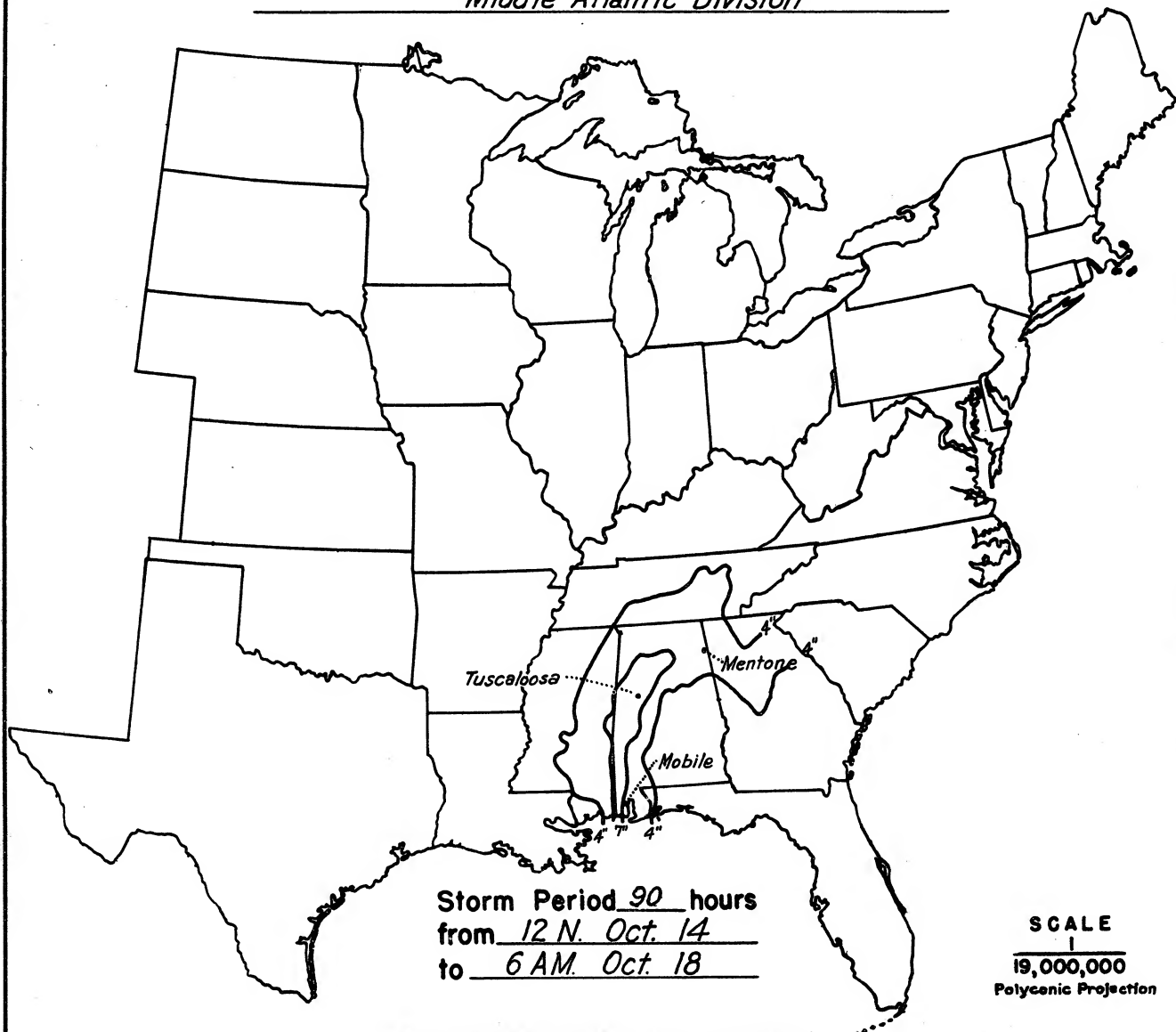
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

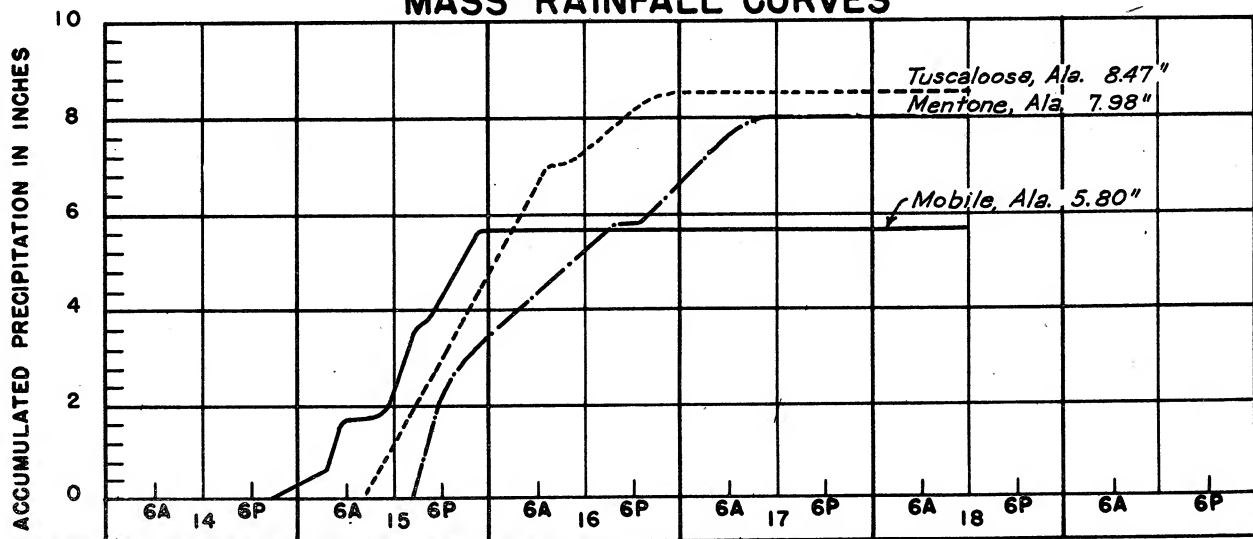
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	90	
10	3.1	5.6	6.6	7.2	7.6	8.2	8.5	8.5	8.5	8.5	
100	2.8	5.1	6.3	7.0	7.5	8.1	8.4	8.4	8.4	8.4	
200	2.7	4.9	6.1	7.0	7.4	8.0	8.3	8.4	8.4	8.4	
500	2.6	4.7	6.0	6.9	7.4	8.0	8.3	8.3	8.3	8.3	
1,000	2.5	4.5	5.8	6.8	7.3	7.9	8.1	8.2	8.2	8.2	
2,000	2.3	4.3	5.6	6.6	7.1	7.8	8.0	8.1	8.1	8.1	
5,000	2.1	4.0	5.4	6.4	6.9	7.5	7.7	7.8	7.9	7.9	
10,000	2.0	3.7	5.1	6.1	6.6	7.2	7.4	7.5	7.6	7.6	
20,000	1.8	3.4	4.7	5.6	6.1	6.7	6.9	7.0	7.1	7.1	
50,000	1.4	2.8	3.9	4.7	5.2	5.6	5.9	6.0	6.1	6.1	
70,000	1.2	2.5	3.5	4.1	4.6	5.0	5.2	5.5	5.5	5.5	

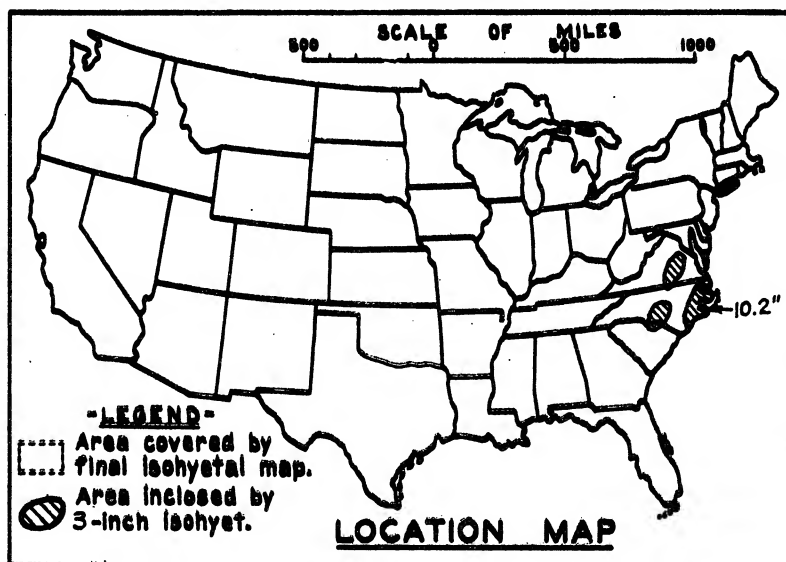
STORM STUDIES - ISOHYETAL MAP

Storm of October 14-18, 1932 Assignment SA 5-11 (B)
Study Prepared by: Norfolk, Virginia District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 5-9, 1934

Assignment SA 5 - 12

Location Va. & N.C.

Study Prepared by:

Middle Atlantic Division

Norfolk District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/23/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/2/44Remarks: Centers at
Beaufort, N. C.,
Roxboro, N.C.,
Rockingham, N.C.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	10
Form 5001-B (24-hour " ").....	17
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	15

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

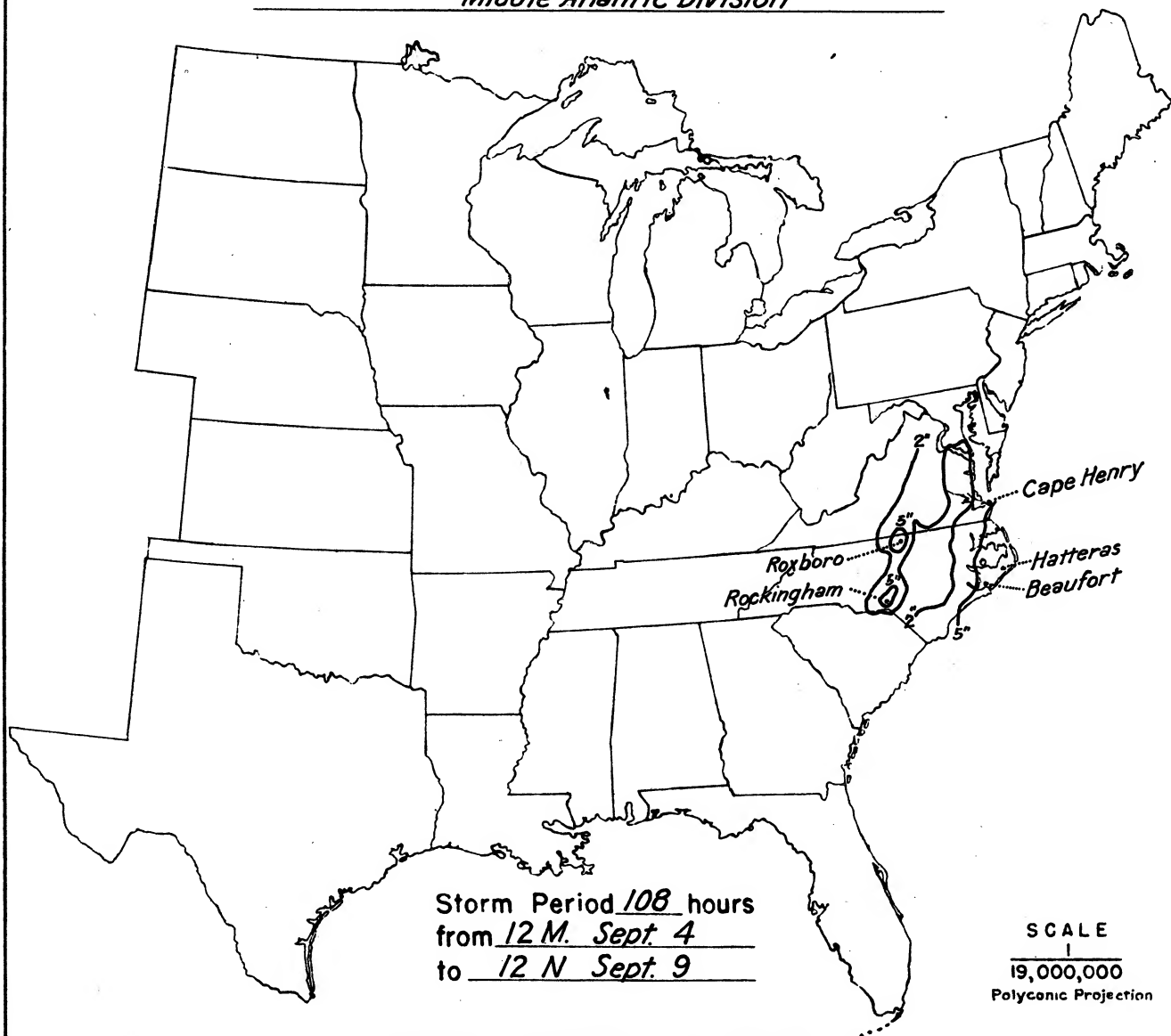
Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	7
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

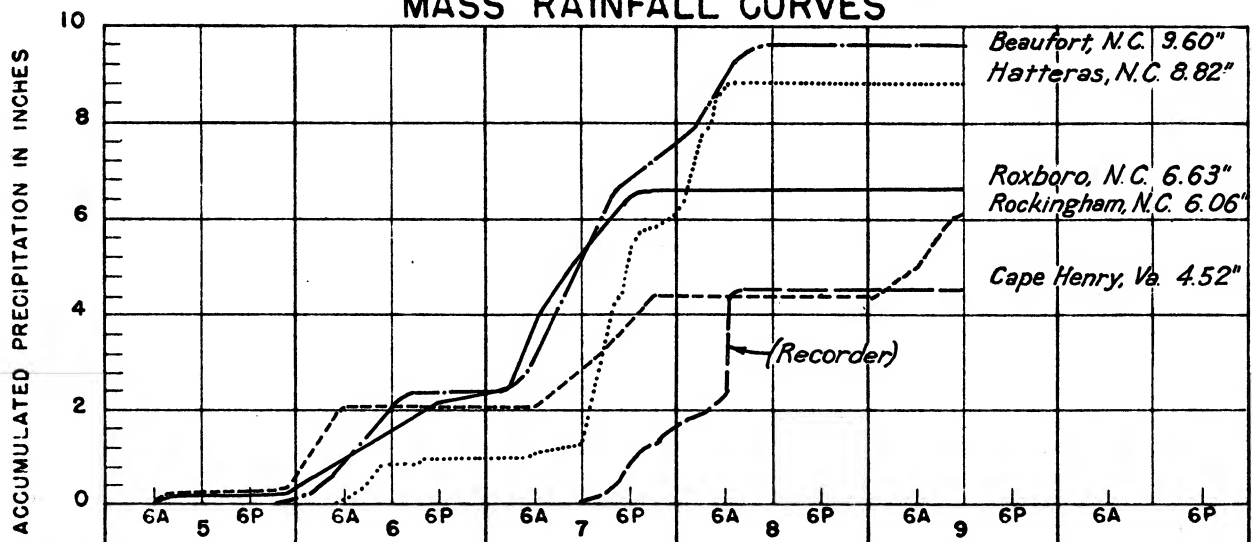
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	4.0	5.2	7.5	7.7	7.9	7.9	8.7	9.6	9.6	9.6	9.6
100	3.7	5.2	7.3	7.6	7.8	7.8	8.7	9.5	9.5	9.5	9.5
200	3.6	5.1	7.2	7.6	7.8	7.8	8.6	9.4	9.4	9.4	9.4
300	3.5	5.0	7.0	7.5	7.7	7.7	8.5	9.3	9.3	9.3	9.3
1,000	3.3	4.9	6.8	7.3	7.5	7.6	8.4	9.0	9.0	9.0	9.0
2,000	3.1	4.7	6.4	7.0	7.3	7.4	8.2	8.7	8.7	8.7	8.7
5,000	2.6	4.2	5.8	6.4	6.7	6.8	7.5	7.9	7.9	7.9	7.9
10,000	2.1	3.6	4.9	5.4	5.7	5.9	6.4	6.6	6.7	6.7	6.7
19,000	1.4	2.3	3.0	3.4	3.7	3.9	4.1	4.4	4.6	4.6	4.6

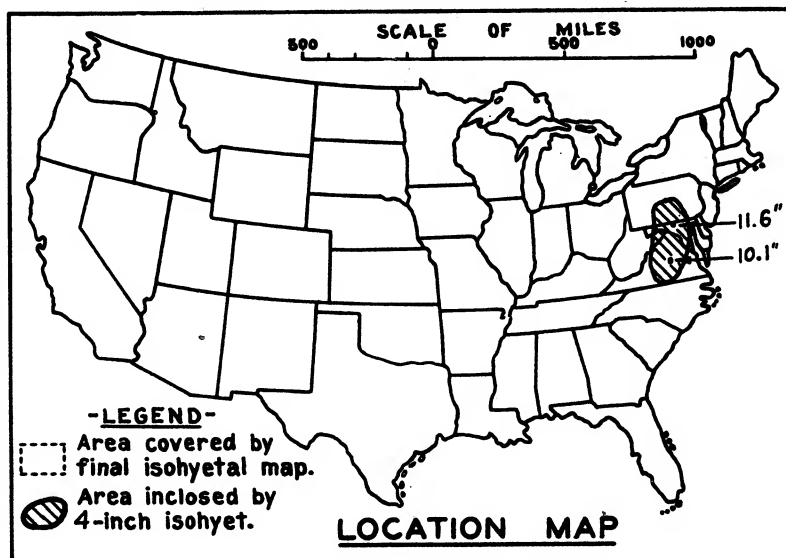
STORM STUDIES - ISOHYETAL MAP

Storm of September 5-9, 1934 Assignment SA-5-12
Study Prepared by: Norfolk, Va. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of April 24 - 28, 1937
 Assignment SA 5 - 13
 Location Va., N.C., Md., & Pa.
 Study Prepared by:
 Middle Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/22/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/2/42

Remarks: Centers at
 Clear Springs, Md. and
 Big Meadows, Va.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	20
Form 5001-B (24-hour " ").....	63
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	37

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

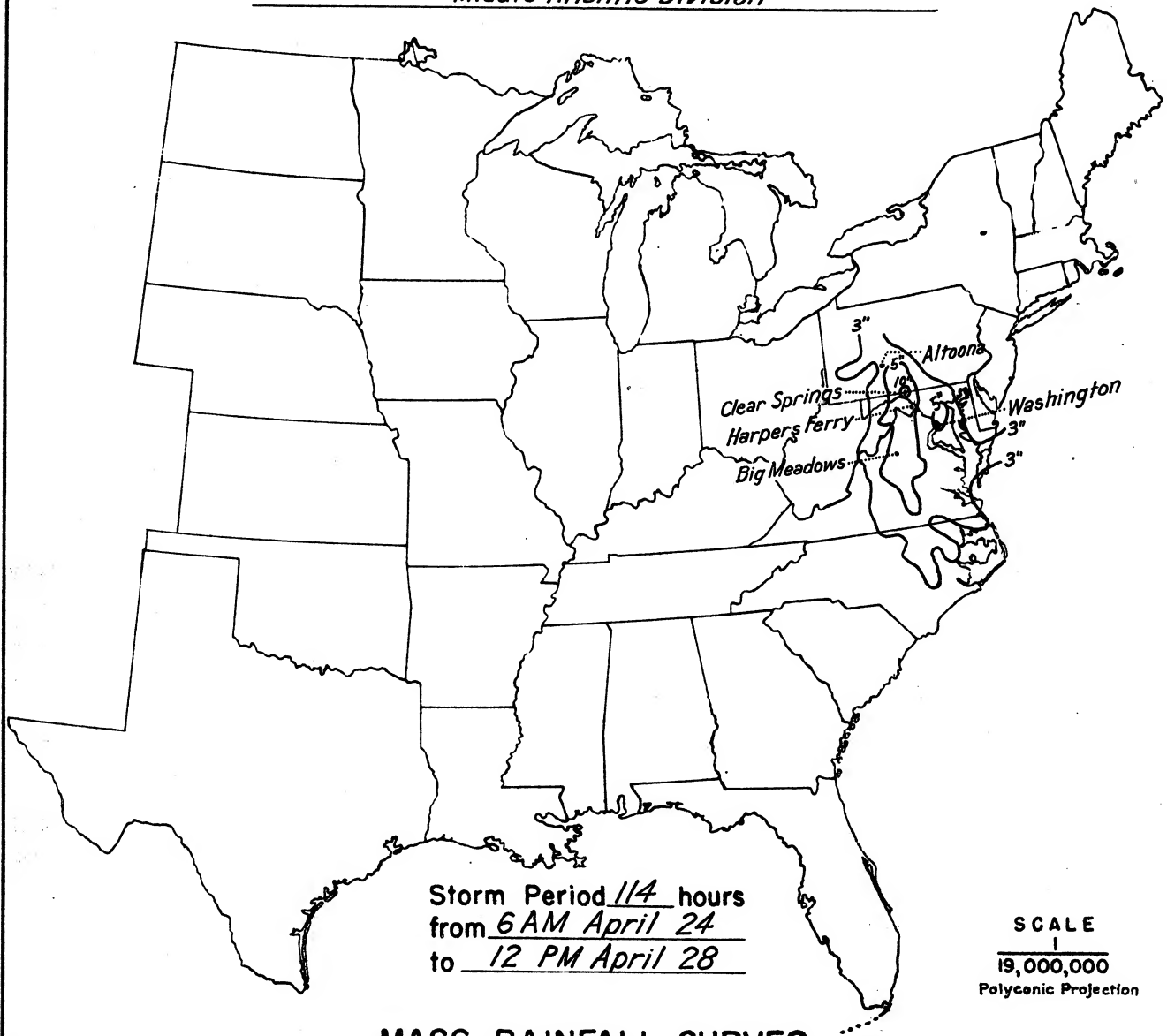
Form S-10 (Data from mass rainfall curves).....	3
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	6
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

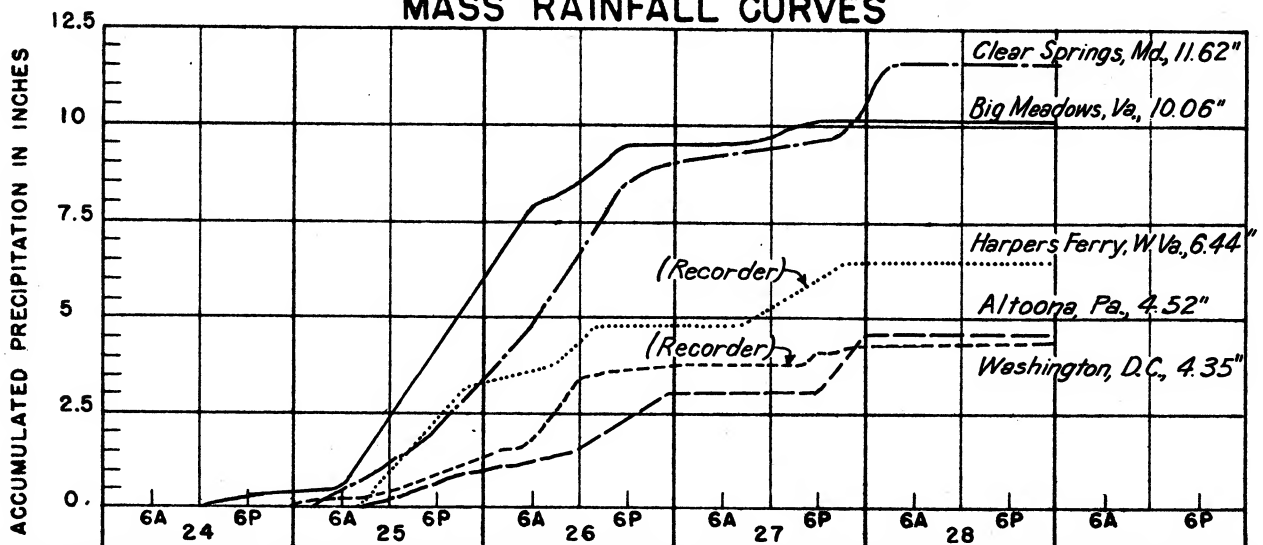
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	144
10	2.4	4.4	6.0	7.3	8.2	9.1	9.2	9.8	11.3	11.6	11.6
100	2.2	4.1	5.7	6.8	7.5	8.3	8.9	9.3	10.2	10.4	10.4
200	2.1	4.0	5.5	6.6	7.3	8.0	8.8	9.1	9.7	9.9	9.9
500	2.0	3.8	5.3	6.3	7.0	7.6	8.4	8.6	9.1	9.3	9.3
1,000	2.0	3.7	5.2	6.1	6.7	7.2	8.1	8.2	8.6	8.8	8.8
2,000	1.9	3.5	4.9	5.8	6.4	6.9	7.5	7.6	8.0	8.3	8.3
5,000	1.7	3.1	4.4	5.2	5.8	6.2	6.7	6.9	7.3	7.5	7.5
10,000	1.5	2.8	3.9	4.6	5.2	5.6	6.0	6.2	6.6	6.8	6.8
20,000	1.2	2.2	3.0	3.7	4.3	4.8	5.2	5.3	5.8	5.9	5.9

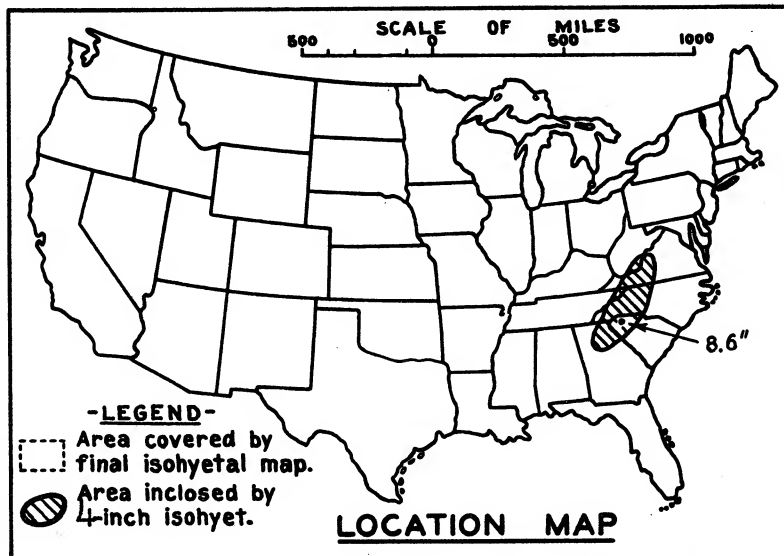
STORM STUDIES - ISOHYETAL MAP

Storm of April 24-28, 1937 Assignment SA 5-13
Study Prepared by: Norfolk, Va. District
Middle Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 17 - 20, 1937
 Assignment SA 5 - 14
 Location Va., N.C., S.C., & Ga.
 Study Prepared by:
 Middle Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/23/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/2/44

Remarks: Centers at
 Caesars Head, S.C. and
 Pinnacles, Va.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 12
 Form 5001-B (24-hour " ")----- 34
 Form 5001-D (" " " ")----- "
 Misc. precip. records, meteorological data, etc.----- "
 Form 5002 (Mass rainfall curves)----- 20

PART II

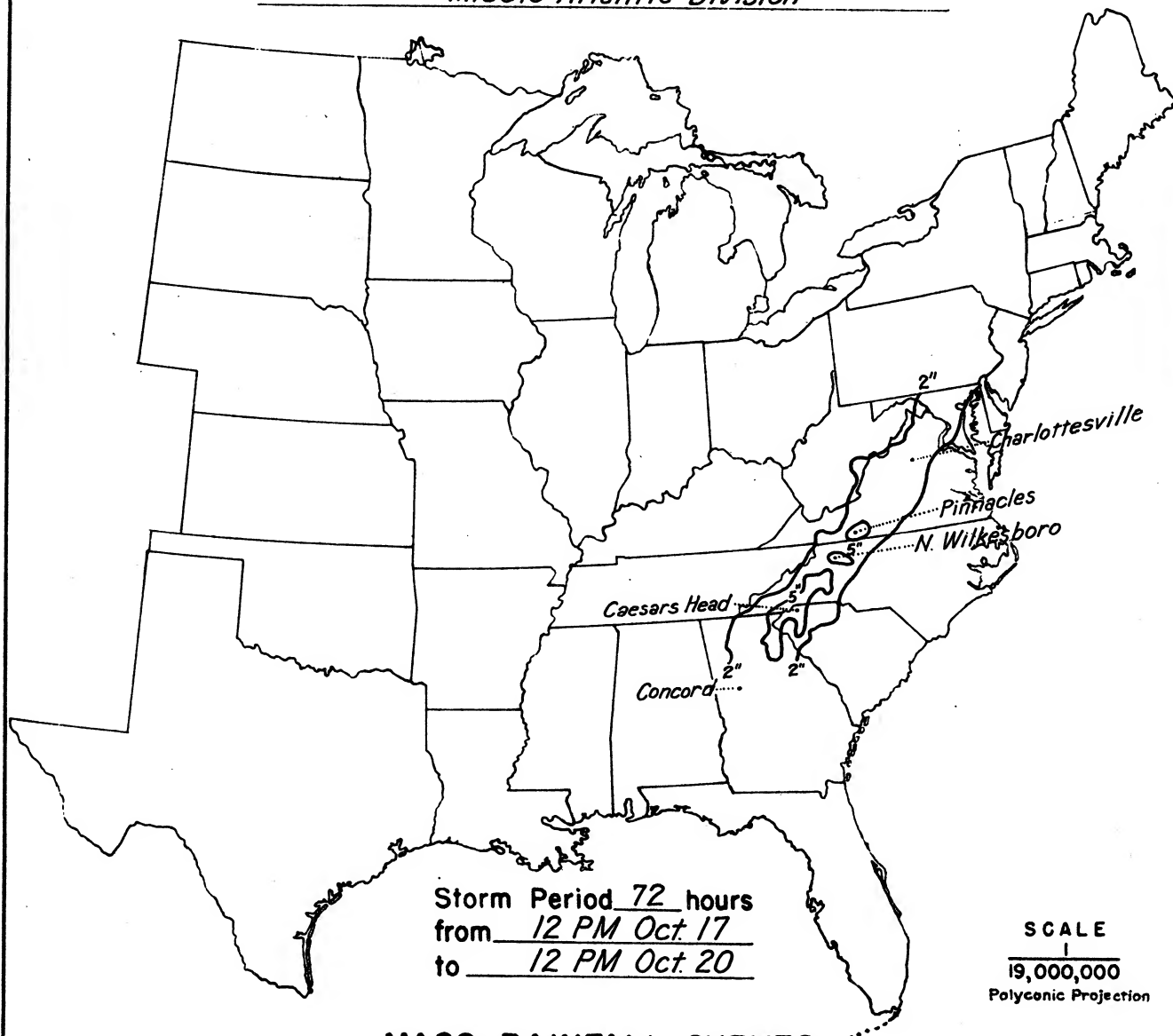
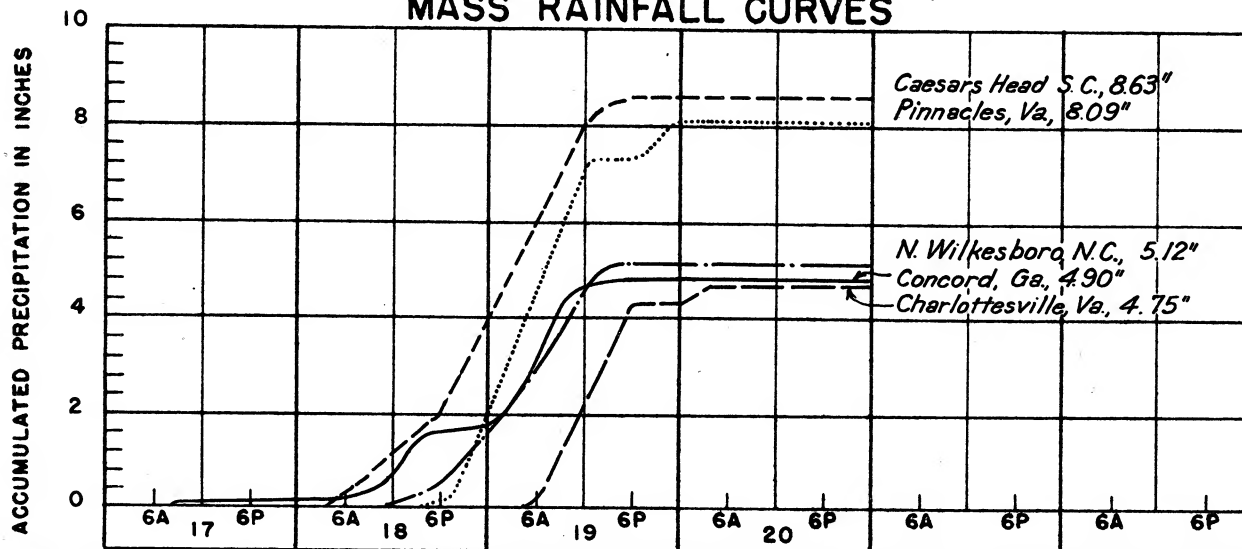
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 2
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 5
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

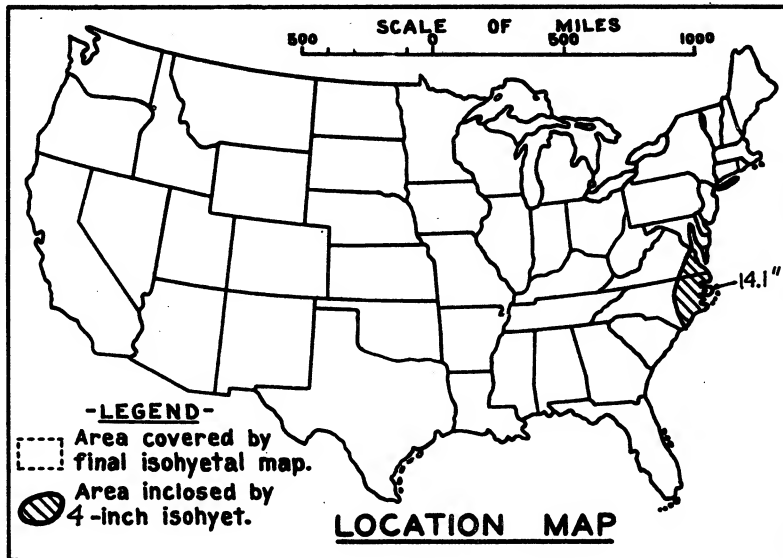
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	3.0	5.7	7.3	7.4	8.1	8.4	8.6	8.6	8.6	
100	2.7	5.0	5.5	6.9	7.7	7.9	8.1	8.1	8.1	
200	2.6	4.7	6.2	6.7	7.5	7.7	7.9	7.9	7.9	
500	2.5	4.4	5.8	6.4	7.1	7.3	7.5	7.5	7.5	
1,000	2.4	4.2	5.5	6.1	6.8	6.9	7.1	7.1	7.1	
2,000	2.3	3.9	5.2	5.8	6.3	6.5	6.7	6.7	6.7	
5,000	2.0	3.5	4.6	5.3	5.7	5.8	5.9	6.0	6.0	
10,000	1.8	3.1	4.1	4.8	5.1	5.2	5.4	5.5	5.5	
15,000	1.6	2.8	3.7	4.5	4.8	4.9	5.1	5.1	5.1	

STORM STUDIES - ISOHYETAL MAP

Storm of October 17-20, 1937 Assignment SA 5-14
 Study Prepared by: Norfolk, Va. District
Middle Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 16-21, 1938

Assignment SA 5 - 16

Location Va. & N.C.

Study Prepared by:

Middle Atlantic Division
Norfolk District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 7/23/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/2/44

Remarks: Centers at

Belhaven, N.C. and
Swansboro, N.C.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " ")-----	28
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	24

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

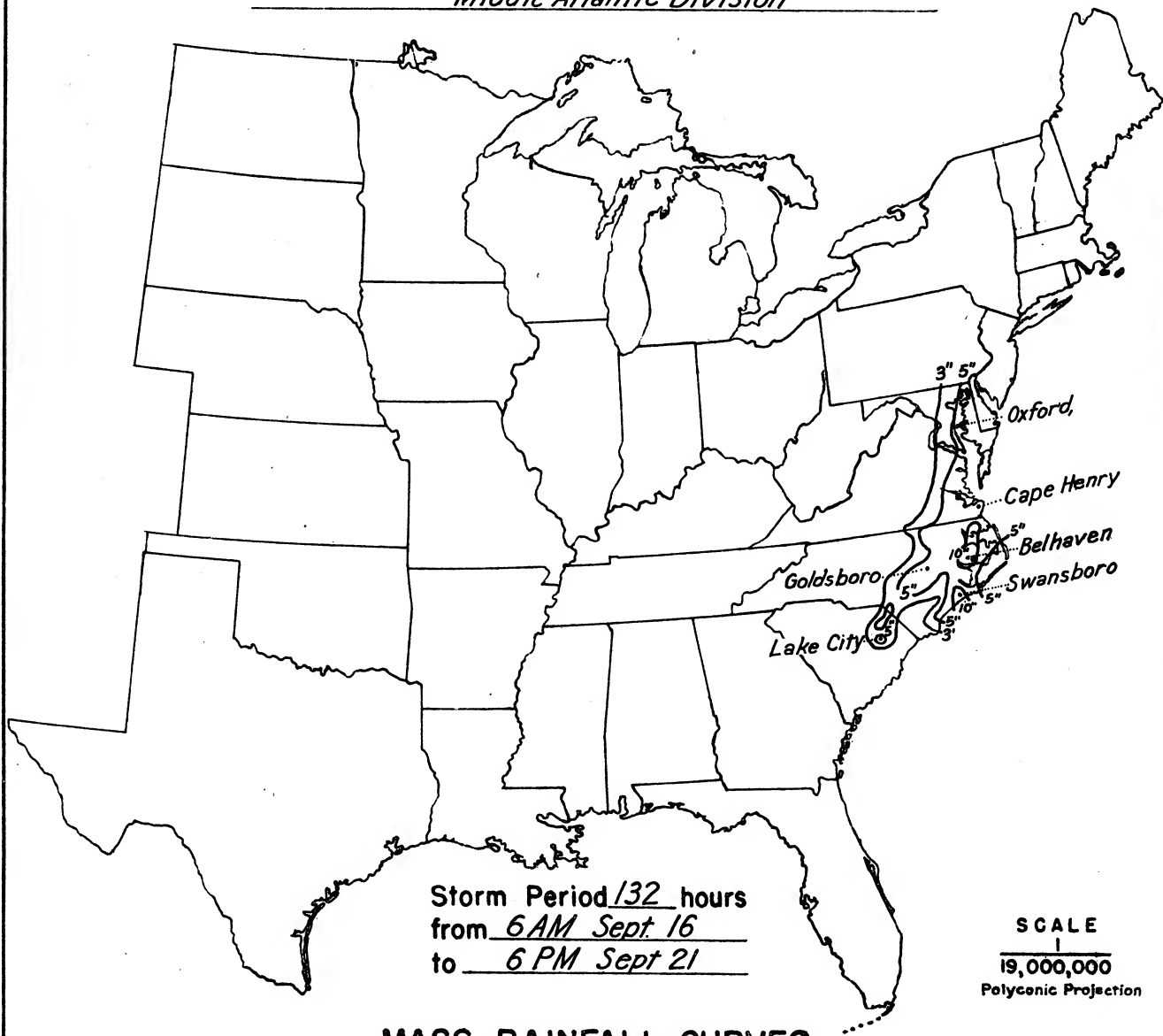
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

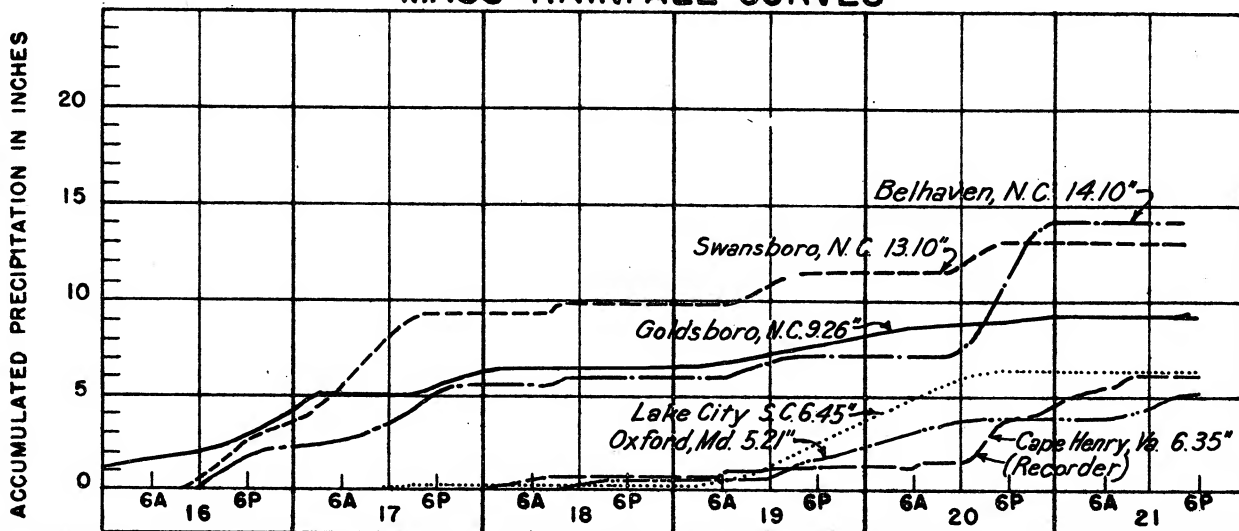
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	132
10	5.0	6.4	6.8	8.2	9.0	9.3	9.5	9.9	11.0	11.7	14.1
100	3.9	5.6	6.6	7.3	7.9	8.4	8.8	9.2	10.0	11.4	13.4
200	3.5	5.4	6.5	7.0	7.6	8.1	8.6	9.0	9.6	11.2	13.2
500	3.0	5.0	6.2	6.5	7.1	7.7	8.2	8.6	9.0	10.9	12.6
1,000	2.7	4.6	5.8	6.1	6.6	7.3	7.8	8.2	8.5	10.5	12.1
2,000	2.3	4.2	5.3	5.7	6.0	6.7	7.3	7.7	7.9	9.8	11.4
5,000	1.8	3.5	4.4	4.8	5.2	5.9	6.5	6.8	7.0	8.7	10.2
10,000	1.4	2.8	3.6	4.1	4.5	5.2	5.8	6.2	6.3	7.7	9.0
20,000	1.0	2.1	2.8	3.2	3.8	4.4	5.0	5.5	5.6	6.6	7.7
40,000	0.7	1.3	1.9	2.3	3.1	3.7	4.3	4.8	4.9	5.5	6.4

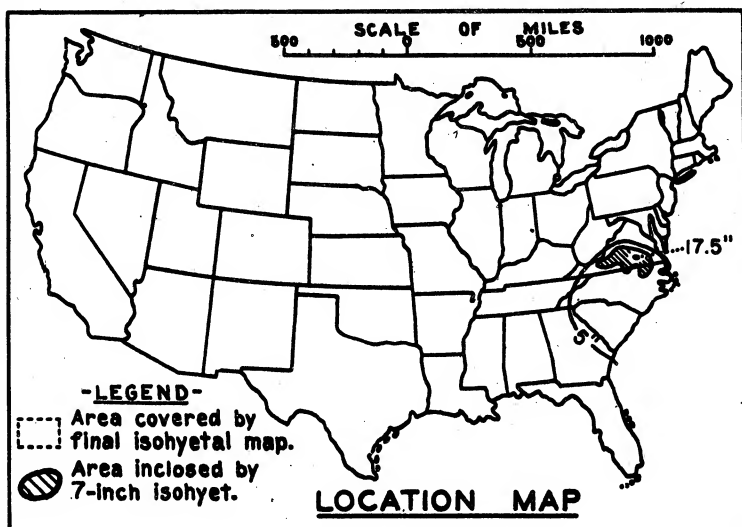
STORM STUDIES - ISOHYETAL MAP

Storm of September 16-21, 1938 Assignment SA 5-16Study Prepared by: Norfolk, Va. District
Middle Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET



Storm of 10-17 August 1940
 Assignment SA 5-19 (a)
 Location Va., NC., S.C., Ga., Tenn
 Study Prepared by:

South Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 3/4/42

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/29/46

Remarks: Center at Keysville,
 Virginia.

DATA AND COMPUTATIONS COMPILED

PART I

Preliminary isohyetal map, in 17 sheets, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	130
Form 5001-B (24-hour " ")-----	48
Form 5001-D (" " " ")-----	--
Misc. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	113

PART II

Final isohyetal maps, in 17 sheets, scale 1:1,000,000

Data and computation sheets:

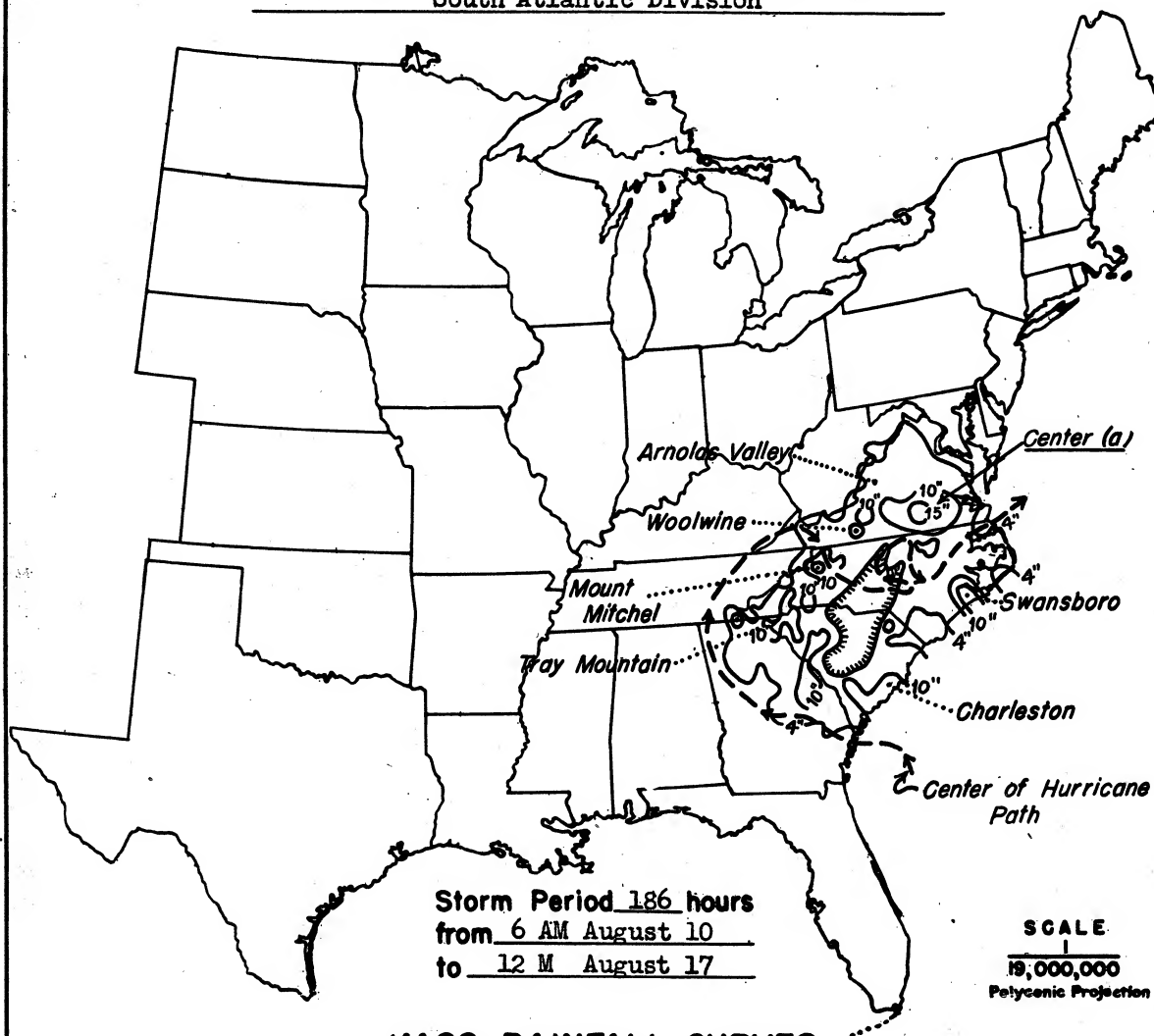
Form S-10 (Data from mass rainfall curves)-----	12
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	30
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	--

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

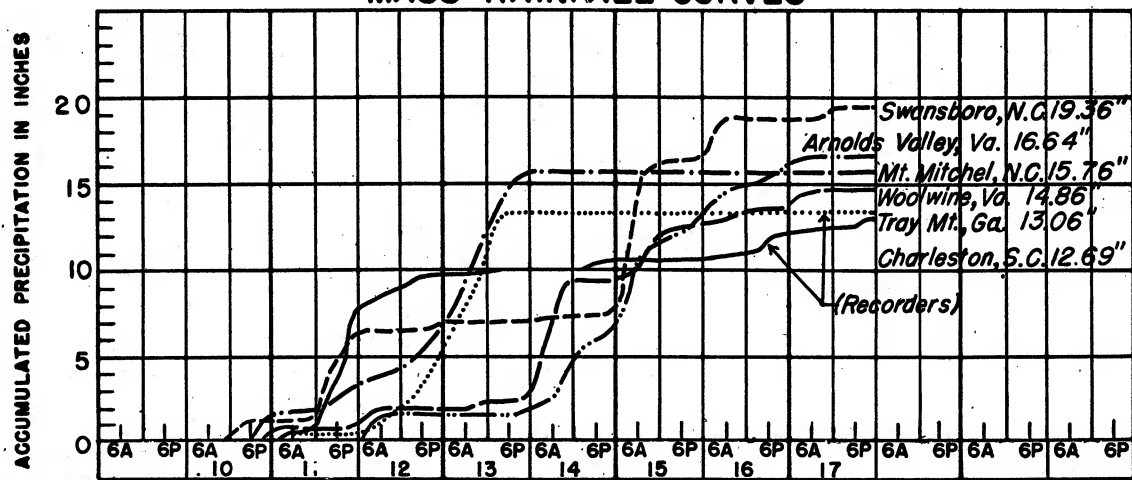
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	96	120	186
10	4.4	8.5	10.5	11.5	12.3	12.8	16.3	16.6	16.9	16.8	17.5
100	4.0	7.8	9.6	10.5	11.3	11.8	15.7	16.0	16.2	16.5	17.2
200	3.9	7.6	9.2	10.2	11.0	11.5	15.4	15.6	16.0	16.3	16.8
500	3.6	7.1	8.7	9.6	10.5	11.1	14.7	15.2	15.4	15.7	16.2
1,000	3.5	6.5	8.1	9.1	10.0	10.6	13.7	14.4	14.9	15.2	15.5
2,000	3.3	5.8	7.4	8.5	9.4	10.1	12.7	13.4	14.3	14.4	14.7
5,000	2.9	4.9	6.4	7.5	8.4	9.2	11.0	12.0	12.9	13.0	13.5
10,000	2.4	4.0	5.4	6.4	7.4	8.2	9.6	10.6	11.6	11.7	12.3
20,000	1.7	3.0	4.0	5.0	5.9	6.6	7.9	8.8	10.0	10.1	10.7
Above data for Keysville, Va. center only											

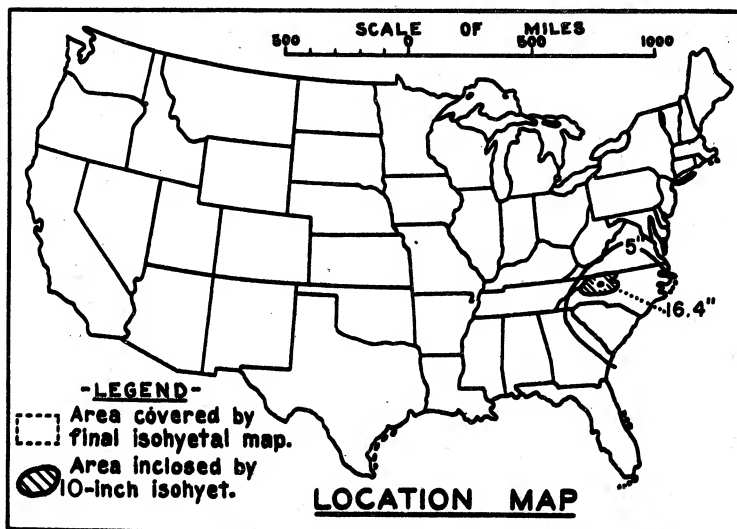
STORM STUDIES - ISOHYETAL MAP

Storm of August 10-17, 1940 Assignment SA 5-19(a)
Study Prepared by: Norfolk, Va. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 10-17 August 1940
 Assignment SA 5-19 (b)
 Location Va., N.C., S.C., Ga., Tenn.
 Study Prepared by:
 South Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 3/4/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/29/46
 Remarks: Center at
 Buck Creek, N. C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 17 sheets, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	130
Form 5001-B (24-hour " ")-----	48
Form 5001-D (" " " ")-----	--
Miscl. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	113

PART II

Final isohyetal maps, in 17 sheets, scale 1:1,000,000

Data and computation sheets:

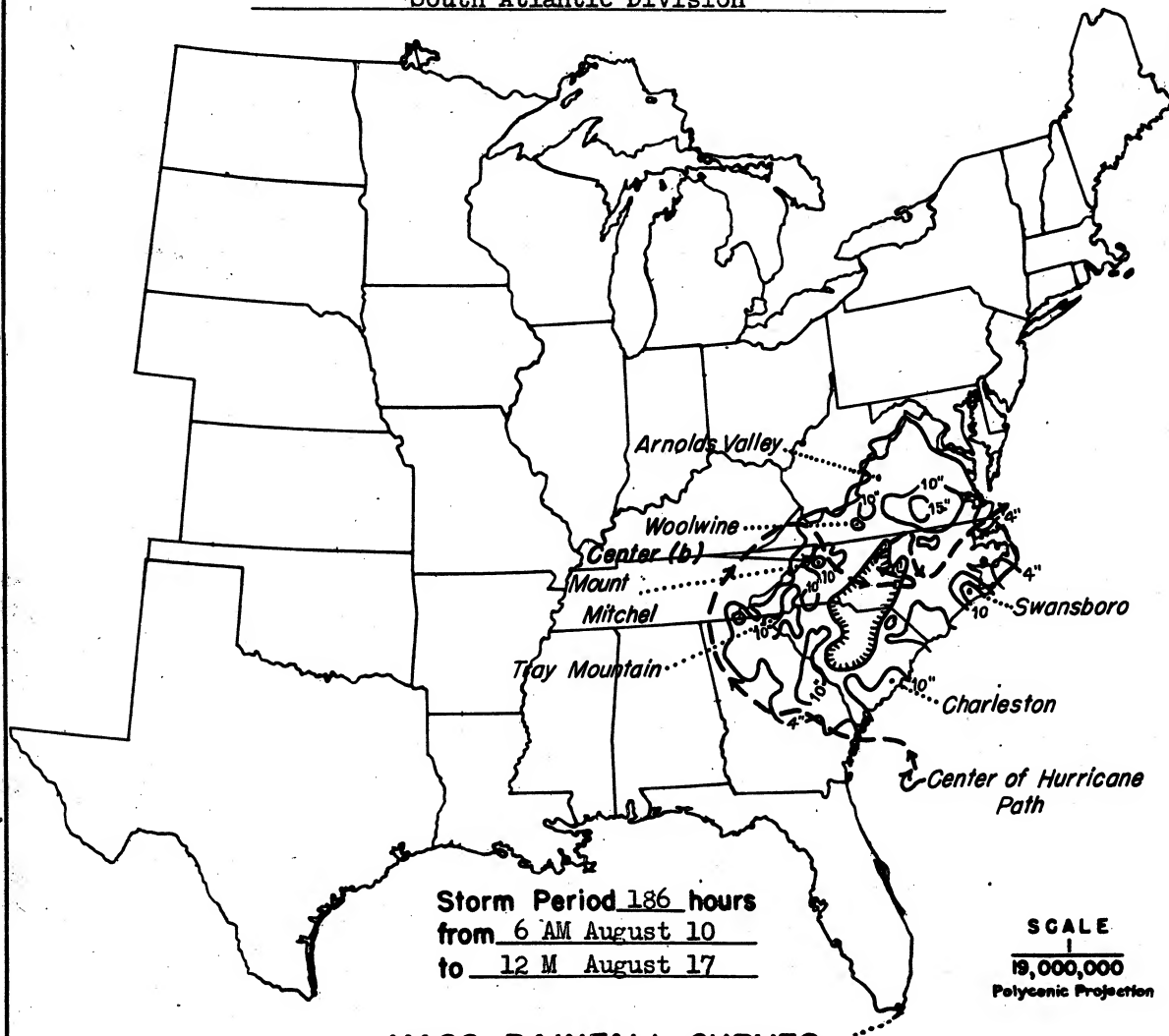
Form S-10 (Data from mass rainfall curves)-----	12
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	30
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	--

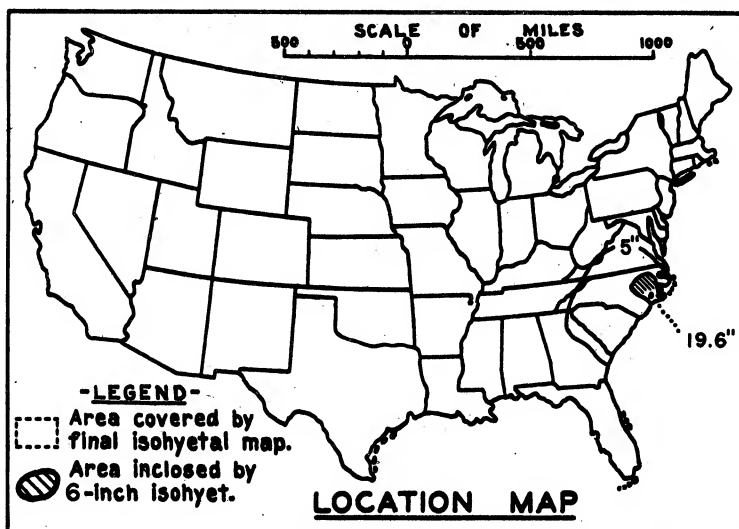
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	96	120	186
10	5.6	8.7	10.0	11.0	12.6	12.8	13.7	14.3	16.0	16.4	16.4
100	4.2	7.0	8.2	9.3	11.3	11.8	13.1	14.0	15.4	15.6	15.6
200	3.8	6.6	7.7	8.9	10.9	11.5	12.8	13.8	15.1	15.3	15.3
500	3.3	5.9	7.1	8.3	10.3	10.9	12.3	13.4	14.5	14.7	14.8
1,000	3.0	5.4	6.7	7.9	9.7	10.4	11.8	12.8	13.7	13.8	14.2
2,000	2.8	4.9	6.3	7.6	9.1	9.6	11.1	11.9	12.6	12.8	13.2
3,000	2.7	4.5	6.0	7.4	8.7	9.1	10.5	11.0	11.9	12.0	12.4
3,250	2.7	4.5	6.0	7.4	8.6	9.0	10.4	10.9	11.7	12.0	12.3
Above data for Buck Creek, N. C. center only											

STORM STUDIES - ISOHYETAL MAP

Storm of August 10-17, 1940 Assignment SA 5-19(b)
 Study Prepared by: Norfolk, Va. District
South Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 10-17 August 1940

Assignment SA 5-19 (c)

Location Va., N.C., S.C., Ga., Tenn

Study Prepared by:

South Atlantic Division

Norfolk District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 3/4/42

Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 10/29/46

Remarks: Center at Swansboro, N. C.

DATA AND COMPUTATIONS COMPILED**PART I**Preliminary isohyetal map, in 17 sheets, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	130
Form 5001-B (24-hour " ")-----	48
Form 5001-D (" " " ")-----	--
Misc. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	113

PART IIFinal isohyetal maps, in 17 sheets, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	12
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	30
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	--

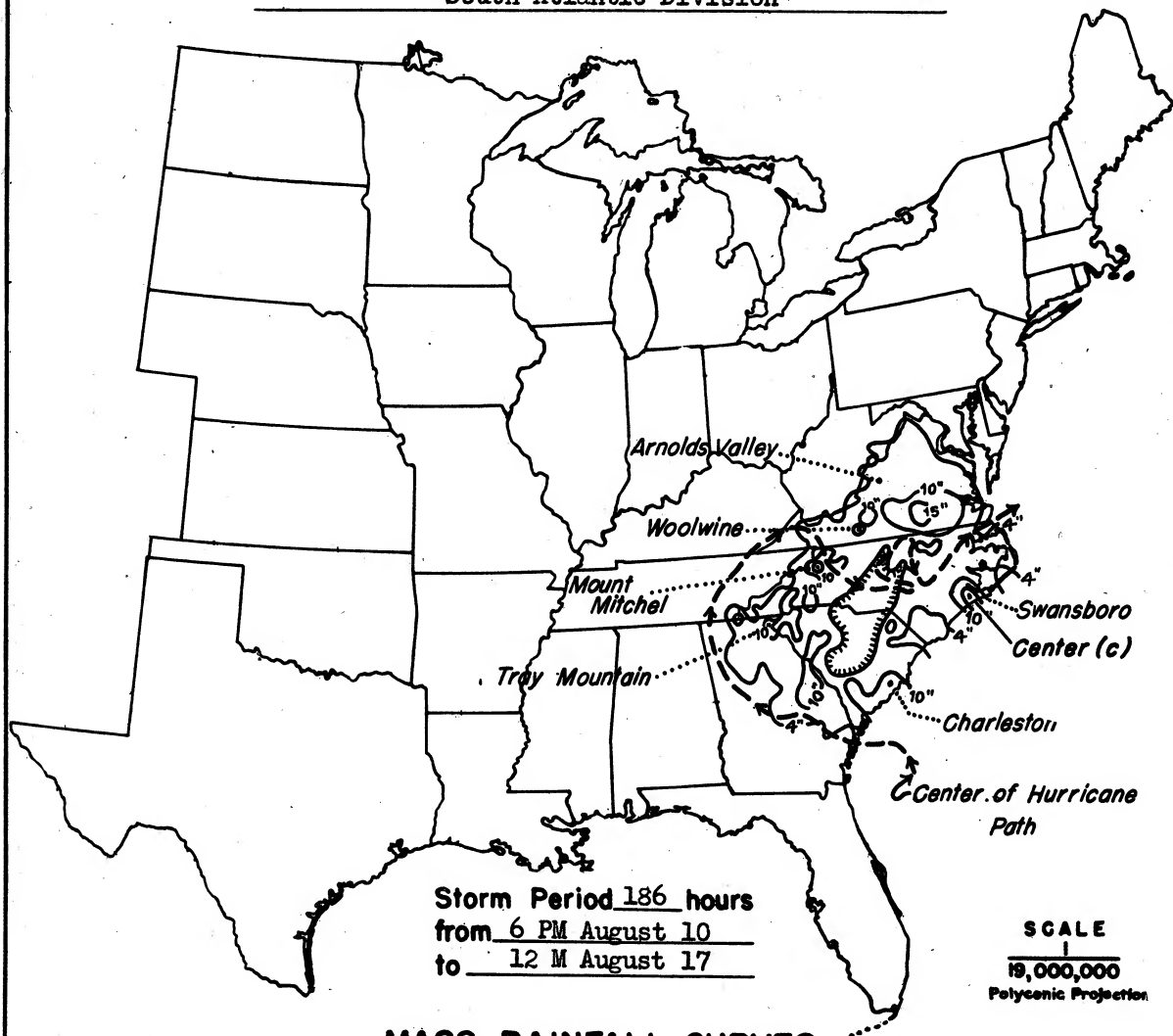
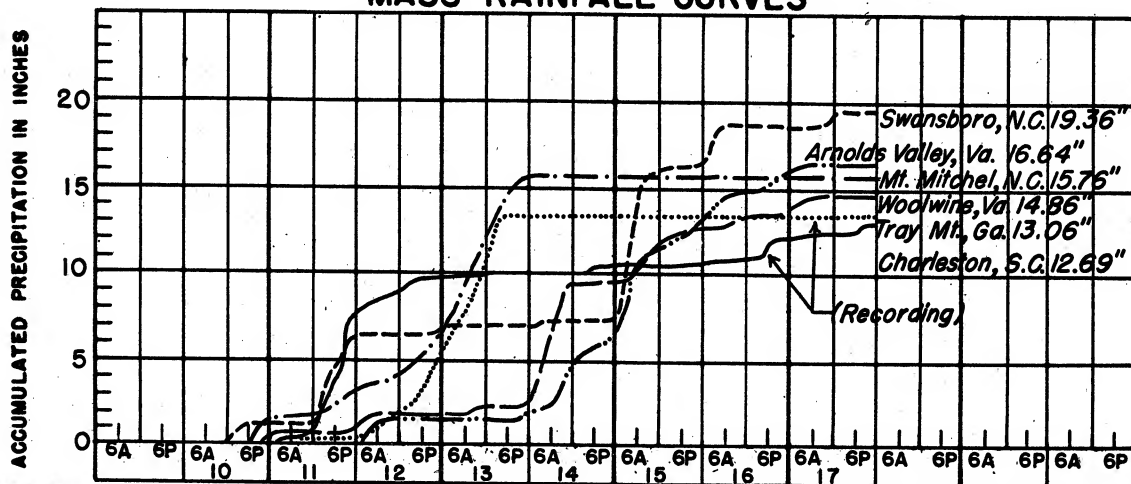
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

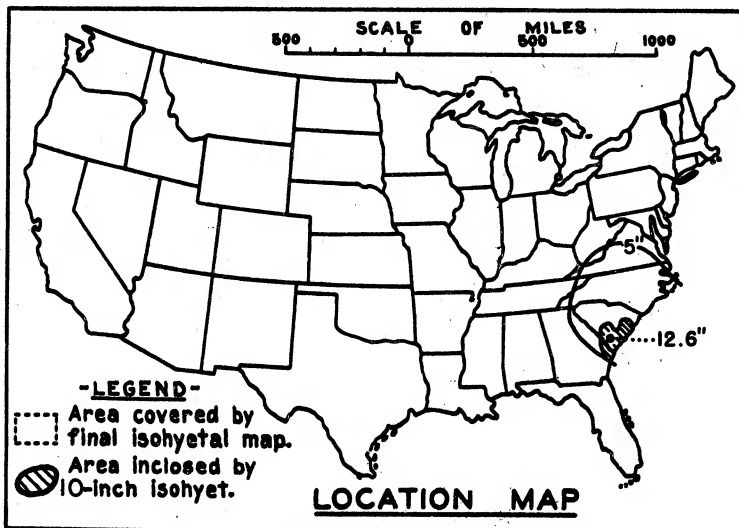
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	96	120	186
10	5.6	8.8	9.0	9.0	11.5	11.5	11.5	11.9	12.4	18.0	19.6
100	5.0	7.6	7.8	8.2	10.3	10.3	10.3	10.4	11.4	13.5	17.8
200	4.7	7.1	7.3	7.7	9.7	9.7	9.7	9.8	10.9	12.1	16.7
500	4.0	6.0	6.2	6.6	8.4	8.5	8.6	8.7	9.8	10.2	14.7
1,000	3.4	4.8	5.0	5.3	6.6	6.9	7.3	7.5	8.6	8.7	12.3
1,850	2.5	3.2	3.3	3.4	3.5	4.5	5.5	5.9	7.2	7.3	10.1

Above data for Swansboro, N. C. center only

STORM STUDIES - ISOHYETAL MAP

Storm of August 10-17, 1940 Assignment SA 5-19(c)
 Study Prepared by: Norfolk, Va. District
South Atlantic Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 10-17 August 1940
 Assignment SA 5-19 (d)
 Location Va., N.C., S.C., Ga., Tenn.
 Study Prepared by:
 South Atlantic Division
 Norfolk District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 3/4/42

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/29/46

Remarks: Center at
 Beaufort, S. C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 17 sheets, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	130
Form 5001-B (24-hour " ")-----	48
Form 5001-D (" " " ")-----	--
Misc. precip. records, meteorological data, etc.-----	--
Form 5002 (Mass rainfall curves)-----	113

PART II

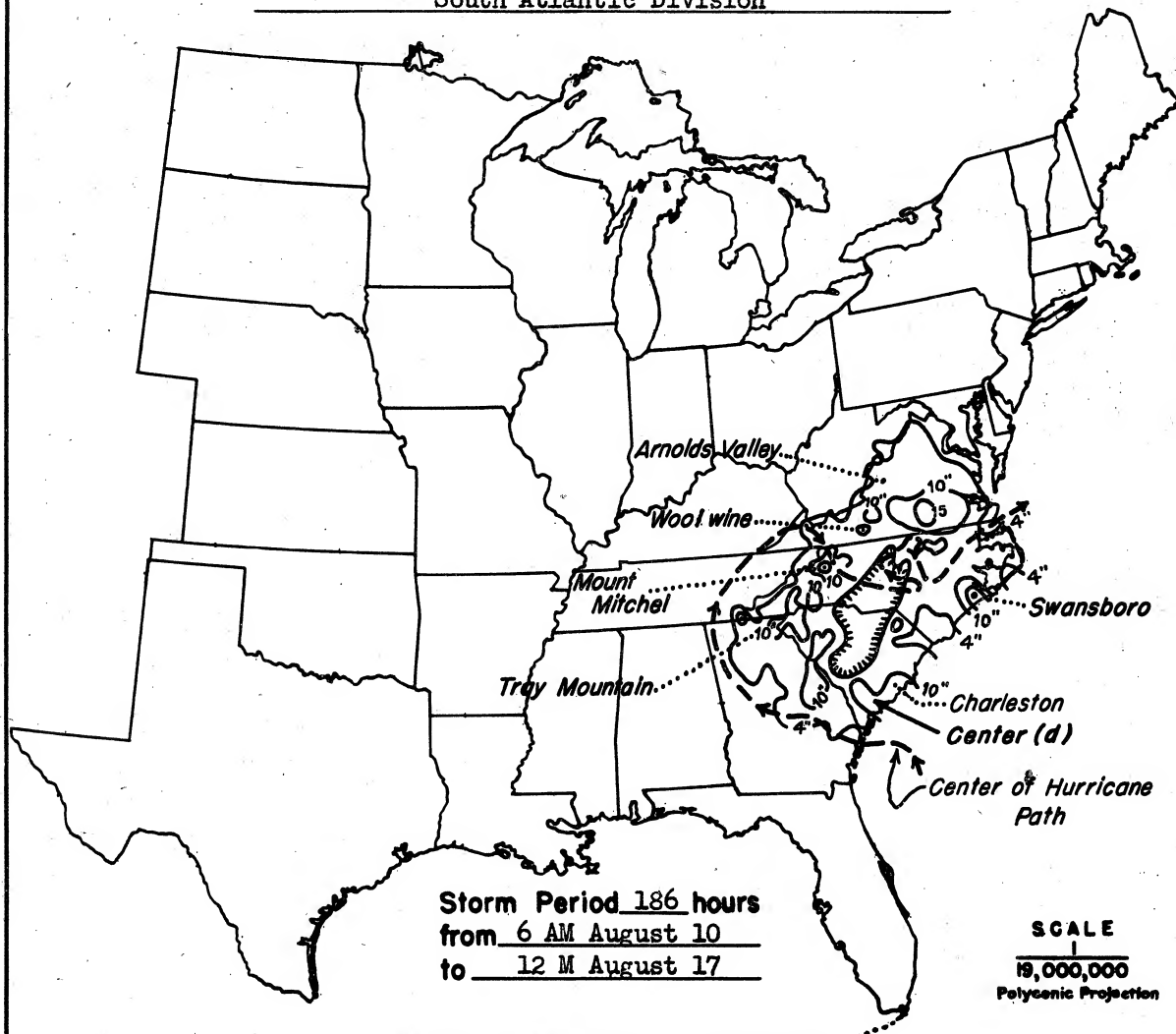
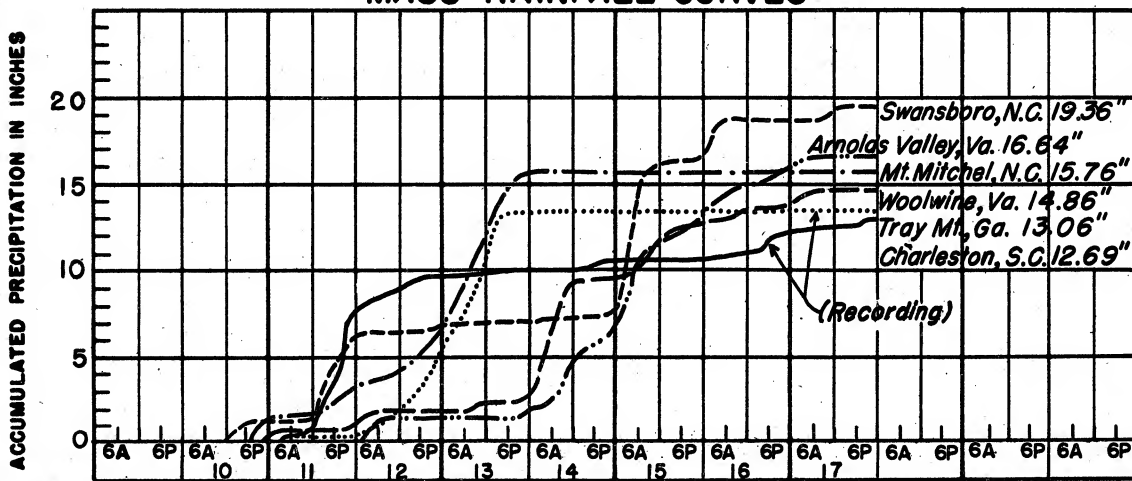
Final isohyetal maps, in 17 sheets, scale 1:1,000,000

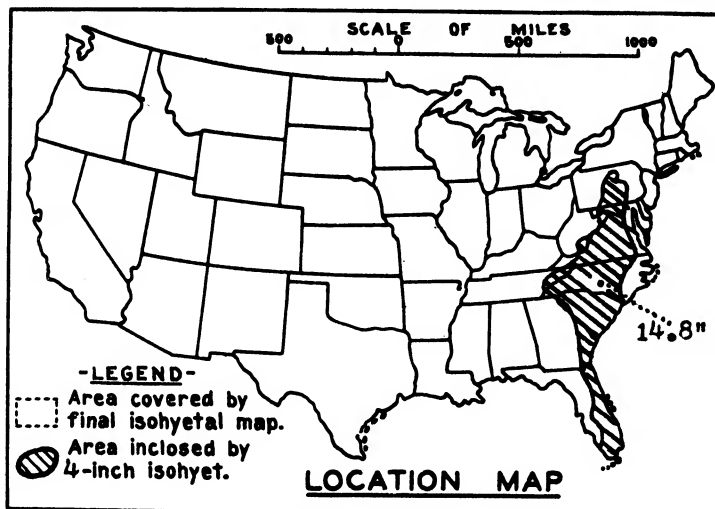
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	12
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	30
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	--

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	96	120	186
10	7.2	9.6	10.6	10.9	10.9	11.1	11.1	11.4	12.2	12.6	12.6
100	6.2	8.6	10.3	10.7	10.7	10.8	11.0	11.2	11.9	12.5	12.6
200	5.8	8.3	10.2	10.6	10.6	10.7	11.0	11.1	11.8	12.4	12.6
500	5.2	7.8	10.0	10.4	10.4	10.6	10.8	11.0	11.6	12.1	12.5
1,000	4.6	7.2	9.7	10.2	10.2	10.4	10.7	10.8	11.4	11.6	12.4
2,000	3.6	6.5	8.6	9.2	9.4	9.8	10.2	10.3	10.8	11.0	11.8
2,600	3.3	6.1	7.9	8.5	9.0	9.5	9.8	10.0	10.4	10.6	11.5
Above data for Beaufort, S. C. center only											

STORM STUDIES - ISOHYETAL MAPStorm of August 10-17, 1940 Assignment SA 5-19(d)Study Prepared by: Norfolk, Va. DistrictSouth Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 13-18 Sept. 1945

Assignment SA 5-27

Location Southeastern U.S.

Study Prepared by:

South Atlantic Division

Wilmington, N. C. District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8-24-48Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6-7-61Remarks: Center at Rockingham,
N. C.Rep. Dewpoint 74°, Ref Pt.
80 SSW

Grid H-7

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	232
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	49
Misc. precip. records, meteorological data, etc.-----	52
Form 5002 (Mass rainfall curves)-----	155

PART II

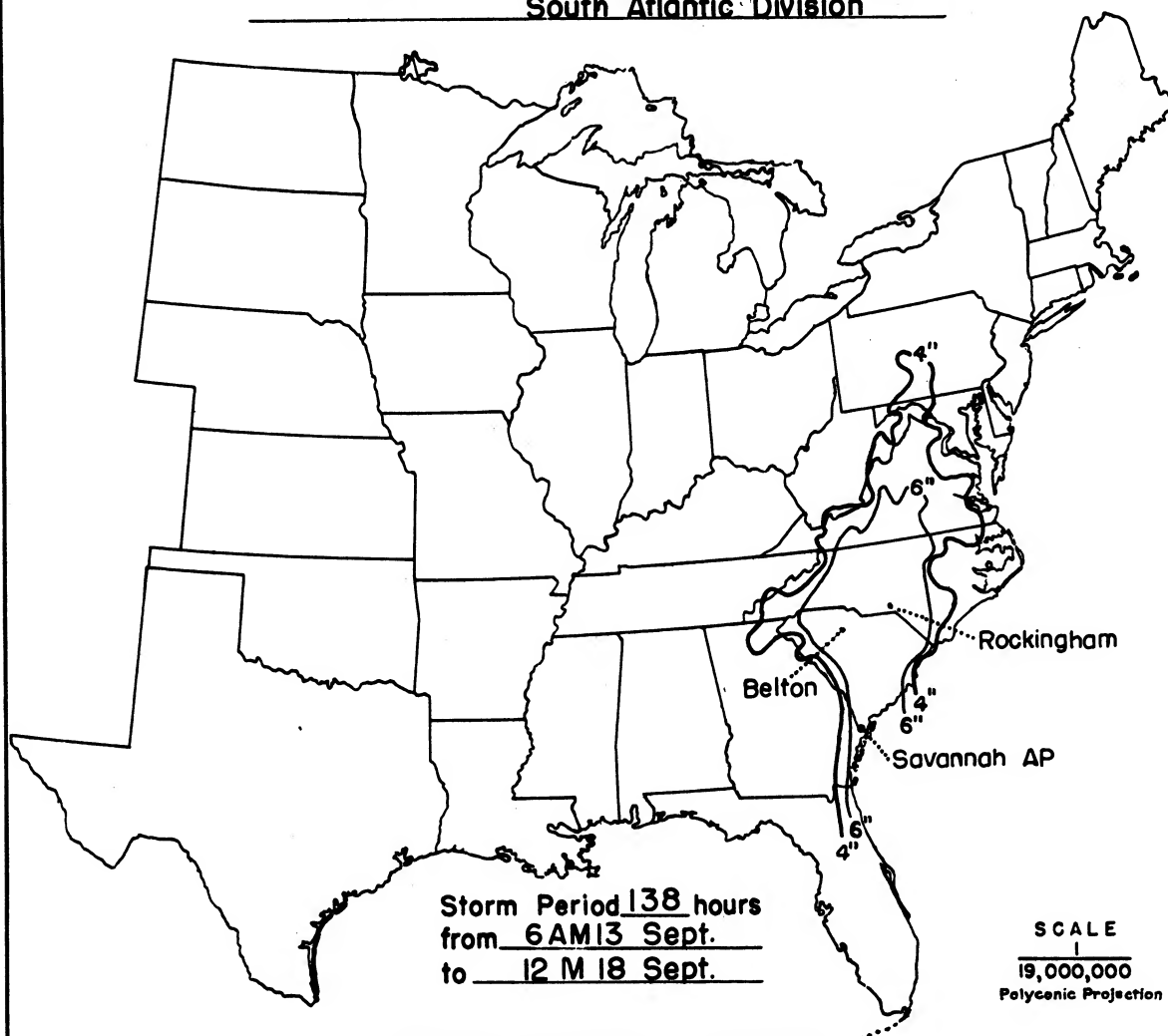
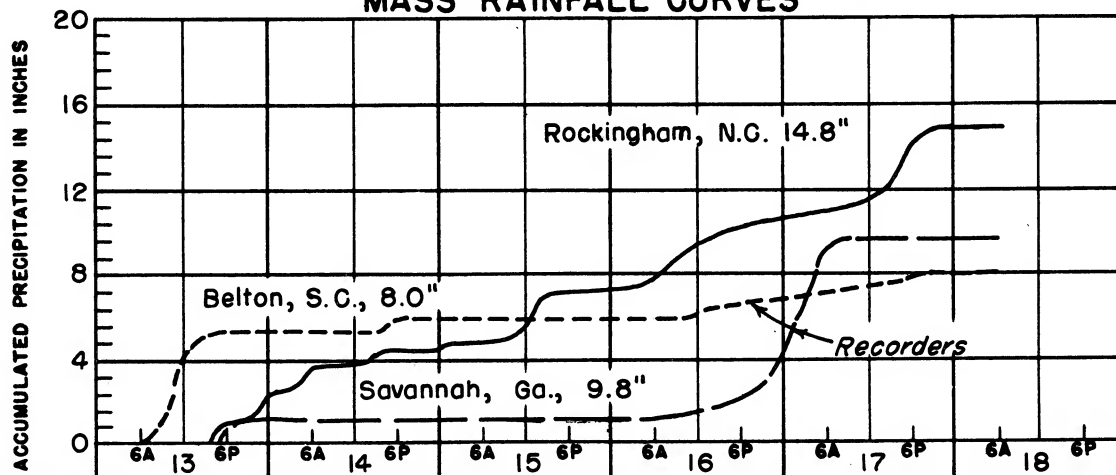
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

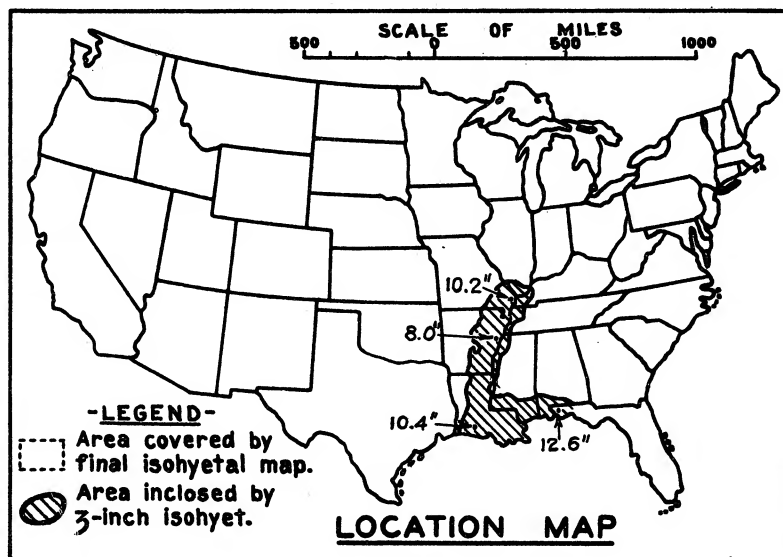
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	29
Form S-11 (Depth-area data from isohyetal map)-----	6
Form S-12 (Maximum depth-duration data)-----	14
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	60	72	96	120	138
10	5.8	7.6	8.3	9.2	9.9	10.7	11.3	12.1	13.7	14.8	14.8
100	4.8	6.8	7.8	9.1	9.9	10.5	11.2	11.8	13.2	13.9	13.9
200	4.4	6.6	7.6	9.1	9.9	10.5	11.1	11.7	13.0	13.6	13.6
500	4.0	6.2	7.3	9.0	9.9	10.3	10.8	11.4	12.7	13.2	13.2
1,000	3.7	5.8	7.0	8.7	9.7	10.0	10.6	11.1	12.4	12.8	12.8
2,000	3.3	5.4	6.6	8.1	9.3	9.6	10.1	10.6	12.0	12.5	12.5
5,000	2.8	4.8	5.9	7.1	8.5	8.9	9.4	10.0	11.4	11.9	11.9
10,000	2.4	4.2	5.2	6.2	7.7	8.2	8.7	9.3	10.8	11.4	11.4
20,000	2.0	3.5	4.3	5.2	6.7	7.3	7.8	8.5	9.9	10.7	10.7
50,000	1.3	2.4	3.1	3.9	5.3	6.0	6.4	6.9	8.1	9.3	9.3
112 200	0.7	1.4	2.0	2.6	3.6	4.3	4.5	4.7	5.7	6.9	7.0

STORM STUDIES - ISOHYETAL MAPStorm of 13-18 September 1945 Assignment SA 5-27Study Prepared by: Wilmington, N.C., District
South Atlantic Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 28 - Oct. 1, 1898
 Assignment L M V 1 - 3
 Location La. Ark. Miss. Ala.
 Study Prepared by: Mo. & Fla.

Lower Mississippi Valley
 Division

Memphis District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/17/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/28/45

Remarks: TOTAL STORM AREA
 Centers at: Sikeston, Mo.,
 Jonesboro, Ark., Marvell, Ark.,
 Monroe, La., Jennings, La., &
 Pensacola, Fla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	13
Form 5001-B (24-hour " ")-----	27
Form 5001-D (" " " ")-----	-
Miscl. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	28

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

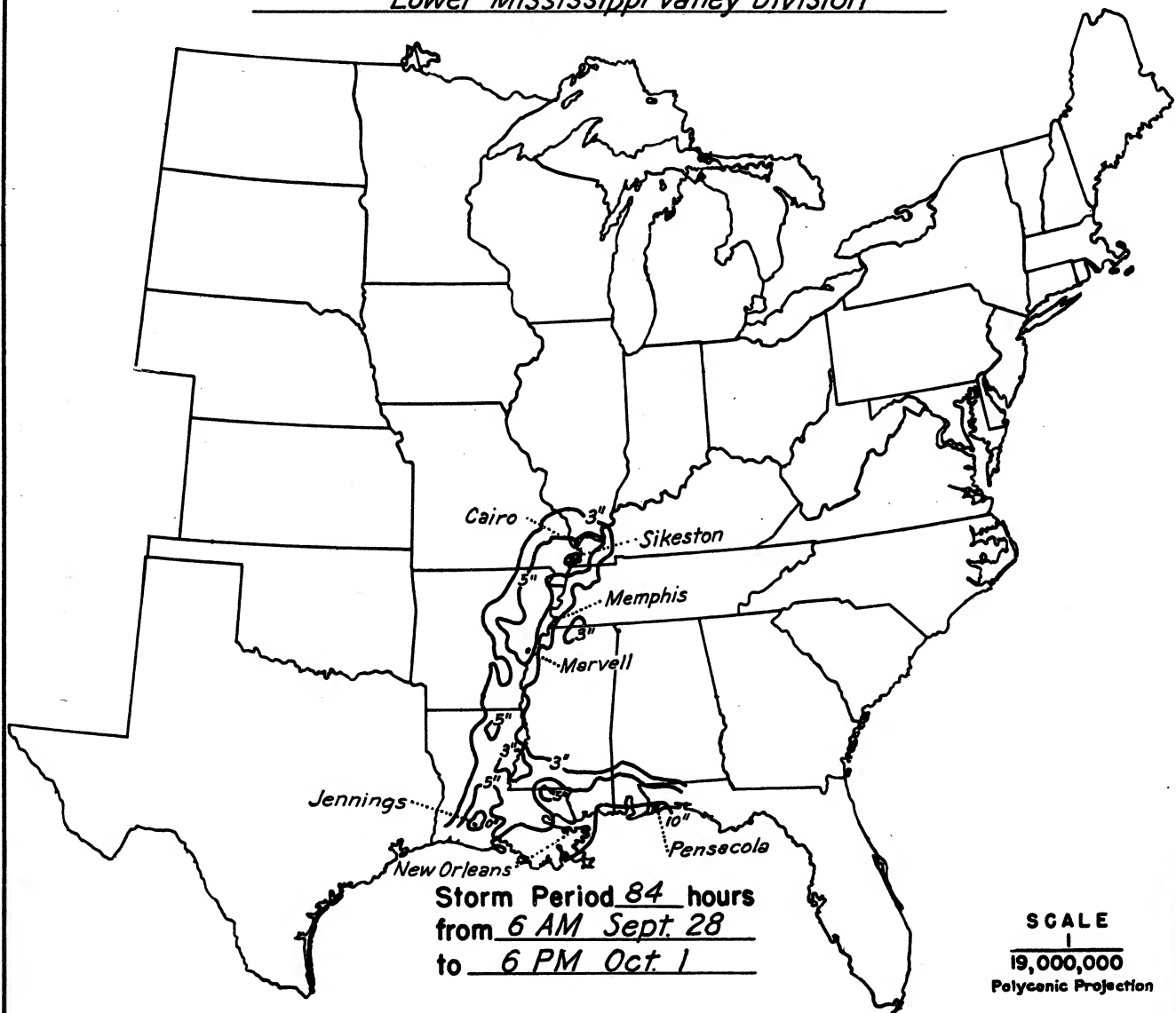
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	15
Maximum duration-depth-area curves-----	3
Data relating to periods of maximum rainfall-----	6

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

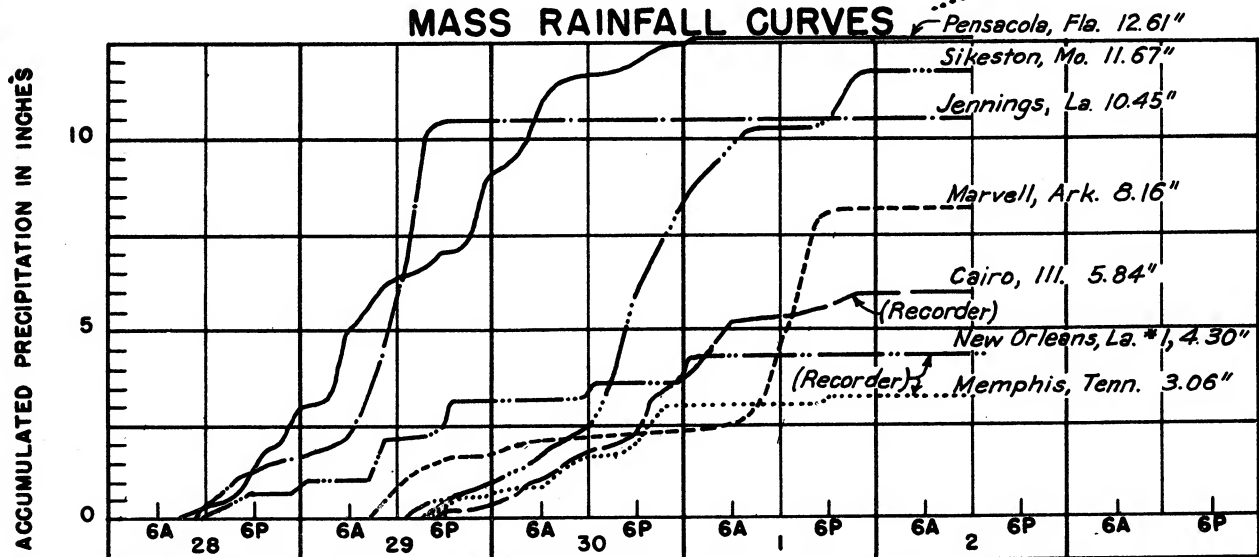
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	6.3	8.5	8.8	9.1	10.0	10.4	11.4	12.3	12.6	12.6
100	5.5	8.5	8.7	9.0	9.8	10.0	10.5	10.9	11.5	11.9
200	5.3	8.4	8.5	8.9	9.7	9.9	10.2	10.4	11.2	11.6
500	4.8	8.1	8.2	8.6	9.3	9.5	9.7	9.8	10.7	11.2
1,000	4.4	7.6	7.7	8.1	8.8	9.0	9.2	9.3	10.2	10.9
2,000	4.0	6.9	7.1	7.5	8.1	8.4	8.6	8.7	9.7	10.3
5,000	3.5	5.7	5.9	6.4	6.9	7.3	7.7	7.9	8.7	9.4
10,000	2.9	4.7	4.9	5.4	5.9	6.2	6.8	7.1	7.9	8.5
20,000	2.3	3.7	3.9	4.3	4.8	5.1	5.7	6.2	6.9	7.4
50,000	1.4	2.2	2.5	2.9	3.3	3.7	4.3	5.0	5.5	6.0
75,500	1.0	1.6	1.9	2.2	2.6	3.0	3.7	4.4	4.9	5.3

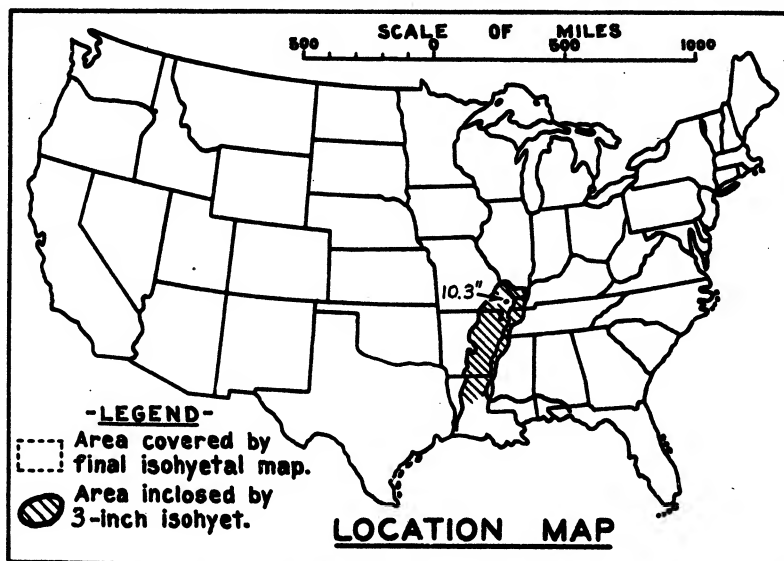
STORM STUDIES - ISOHYETAL MAP

Storm of September 28-October 1, 1898 Assignment LMV 1-3
 Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 28 - Oct. 1, 1898

Assignment L M V 1 - 3 (a)

Location La. Ark. Miss. Ala. &

Study Prepared by: Mo.

Lower Mississippi Valley
Division

Memphis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/17/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/28/45

Remarks: NORTHERN AREA ONLY

Centers at; Sikeston, Mo.,
Jonesboro, and Marvell, Ark.
and Monroe, La.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	13
Form 5001-B (24-hour " ").....	27
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	28

PART II

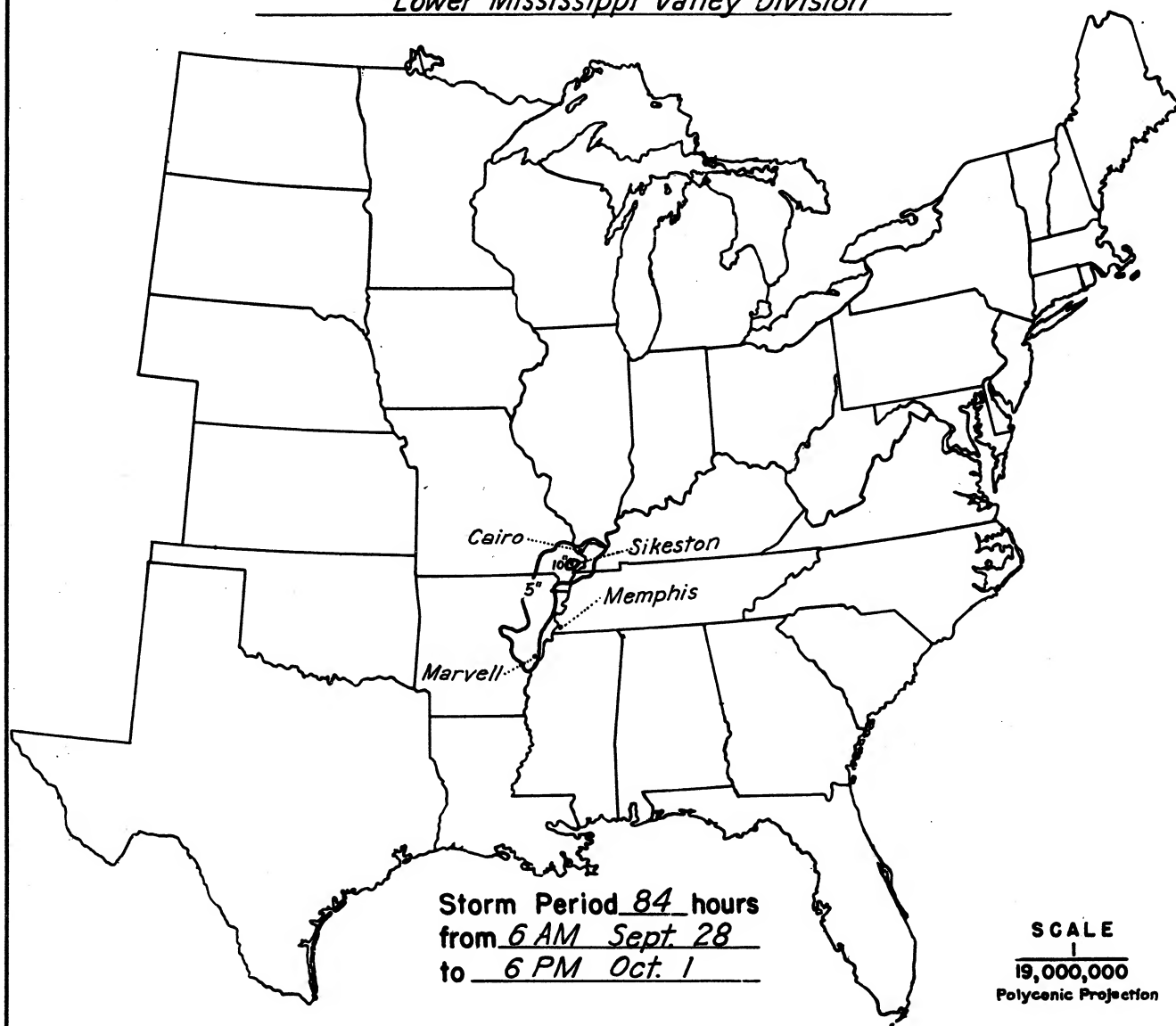
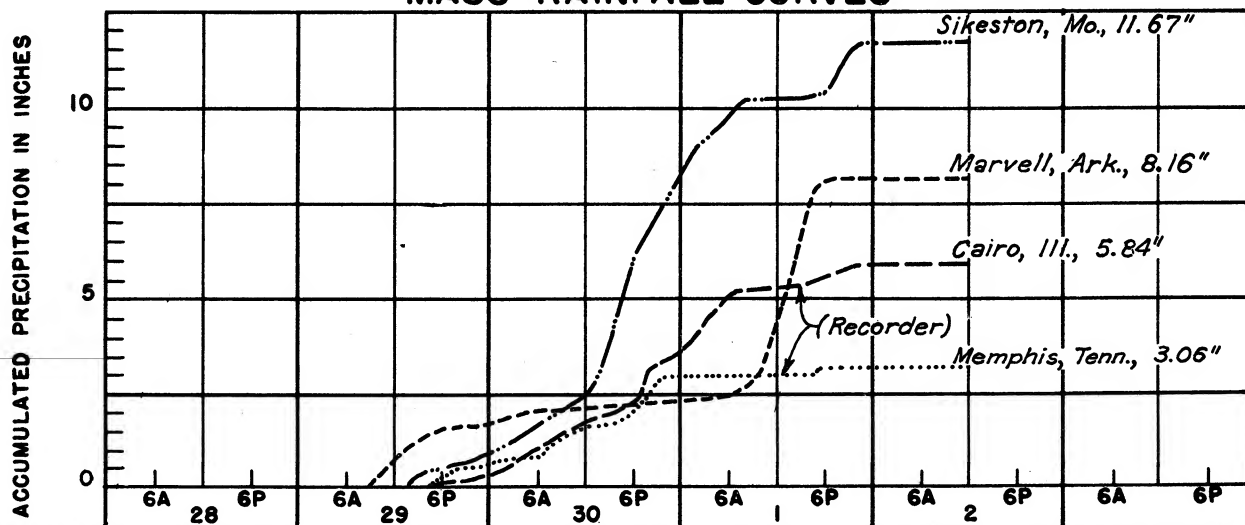
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

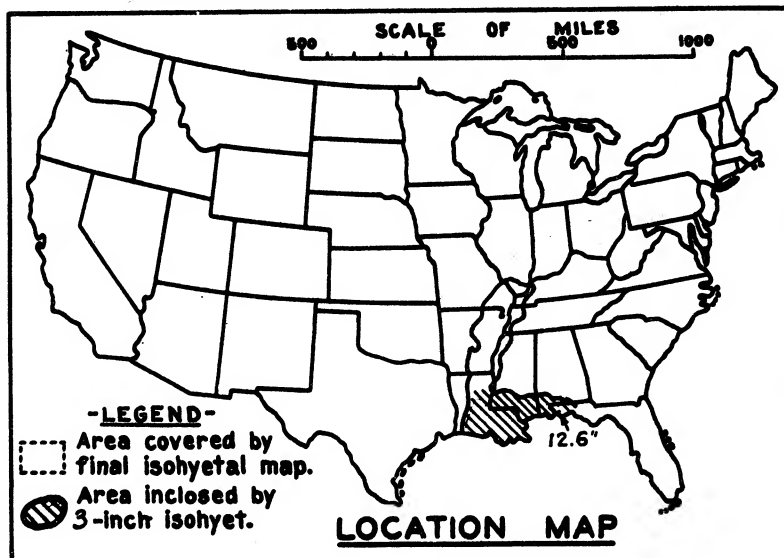
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	3
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	15
Maximum duration-depth-area curves.....	3
Data relating to periods of maximum rainfall.....	6

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	84	
10	4.6	5.5	7.4	8.4	9.0	9.4	10.2	10.3	10.3	
100	4.3	5.3	7.3	8.1	8.6	9.1	9.9	9.9	9.9	
200	4.1	5.1	7.1	7.9	8.4	9.0	9.7	9.7	9.7	
500	3.6	4.7	6.7	7.5	8.0	8.6	9.3	9.3	9.3	
1,000	3.2	4.3	6.2	6.9	7.5	8.2	8.8	8.9	8.9	
2,000	2.8	3.8	5.5	6.2	6.8	7.5	8.1	8.3	8.3	
5,000	2.2	3.1	4.5	5.1	5.7	6.3	7.1	7.4	7.4	
10,000	1.7	2.6	3.6	4.2	4.8	5.3	6.1	6.6	6.6	
20,000	1.2	2.0	2.8	3.3	3.8	4.3	5.2	5.7	5.7	

STORM STUDIES - ISOHYETAL MAPStorm of September 28 - October 1, 1898 Assignment LMV 1-3 (a)Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 28 - Oct. 1, 1898
 Assignment L M V 1 - 3 (b)
 Location La. Miss. Ala. & Fla.
 Study Prepared by:

Lower Mississippi Valley
 Division

Memphis District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/17/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/28/45

Remarks: COSTAL AREA ONLY
 Centers at; Jennings, La.
 and Pensacola, Fla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	13
Form 5001-B (24-hour " ")-----	27
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	28

PART II

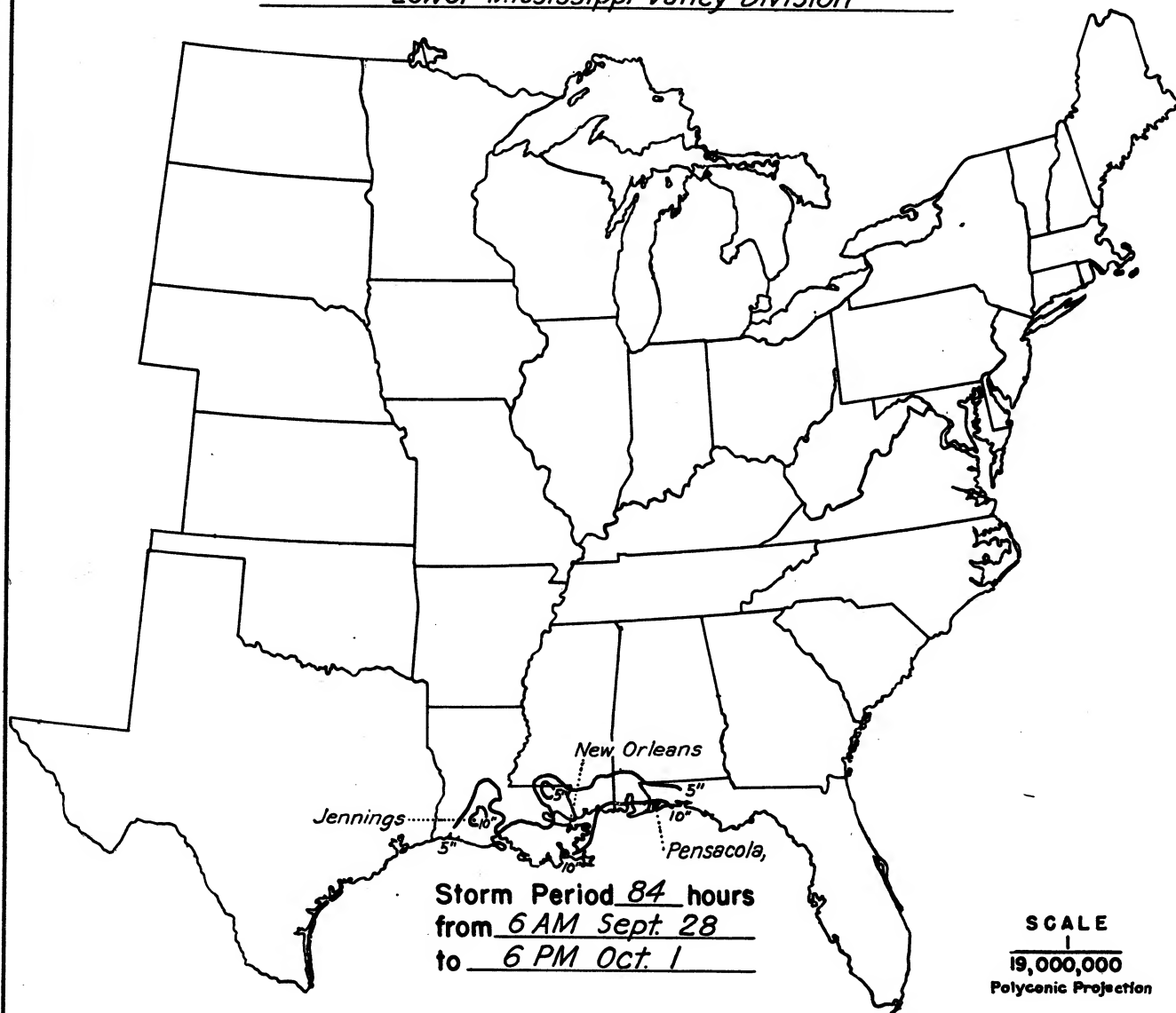
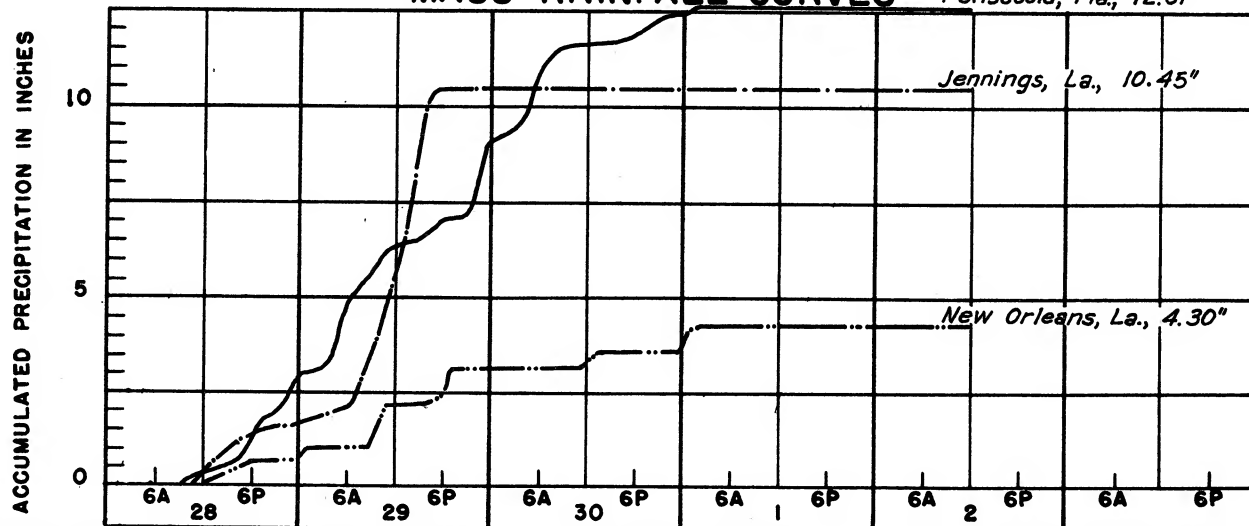
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

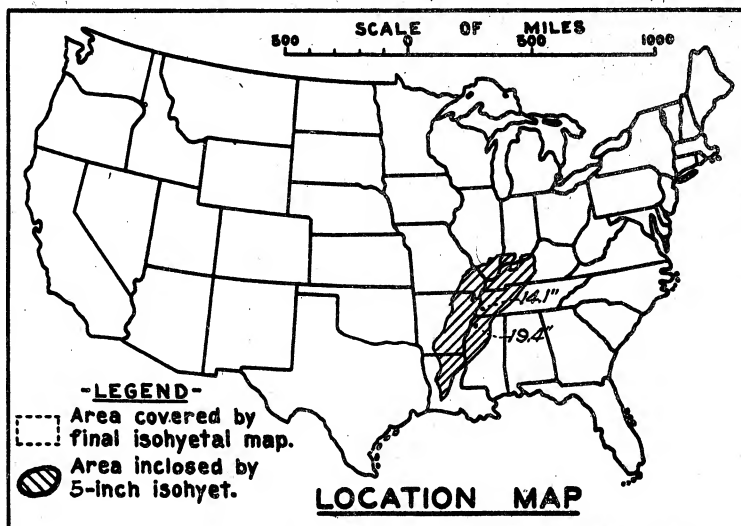
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	15
Maximum duration-depth-area curves-----	3
Data relating to periods of maximum rainfall-----	6

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	6.3	8.5	8.8	9.1	10.0	10.4	11.4	12.3	12.6	12.6
100	5.5	8.5	8.7	9.0	9.8	10.0	10.5	10.9	11.5	11.8
200	5.2	8.4	8.5	8.9	9.6	9.8	10.2	10.4	11.2	11.6
500	4.8	8.1	8.2	8.6	9.3	9.5	9.6	9.8	10.6	11.2
1,000	4.4	7.6	7.7	8.1	8.8	9.0	9.2	9.3	10.2	10.8
2,000	4.0	6.9	7.1	7.5	8.1	8.4	8.6	8.7	9.7	10.3
5,000	3.5	5.7	5.9	6.3	6.9	7.3	7.7	7.9	8.7	9.4
10,000	2.9	4.7	4.9	5.3	5.8	6.2	6.8	7.1	7.9	8.5
20,000	2.3	3.6	3.9	4.2	4.7	5.1	5.7	6.2	6.8	7.3

STORM STUDIES - ISOHYETAL MAPStorm of September 28 - October 1, 1898 Assignment LMV 1-3 (b)Study Prepared by: Memphis, Tenn. DistrictLower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 17-21 Nov. 1906
 Assignment L M V 1 - 4
 Location La., Miss., Ark., Tenn.
 Study Prepared by:
 Lower Mississippi Valley
 Division
 Memphis District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/8/45

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/13/46

Remarks: Centers at

Austin, Miss., and Memphis
 Tenn.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	26
Form 5001-B (24-hour " " " ").....	59
Form 5001-D (" " " " " ").....	—
Misc. precip. records, meteorological data, etc.....	—
Form 5002 (Mass rainfall curves).....	59

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

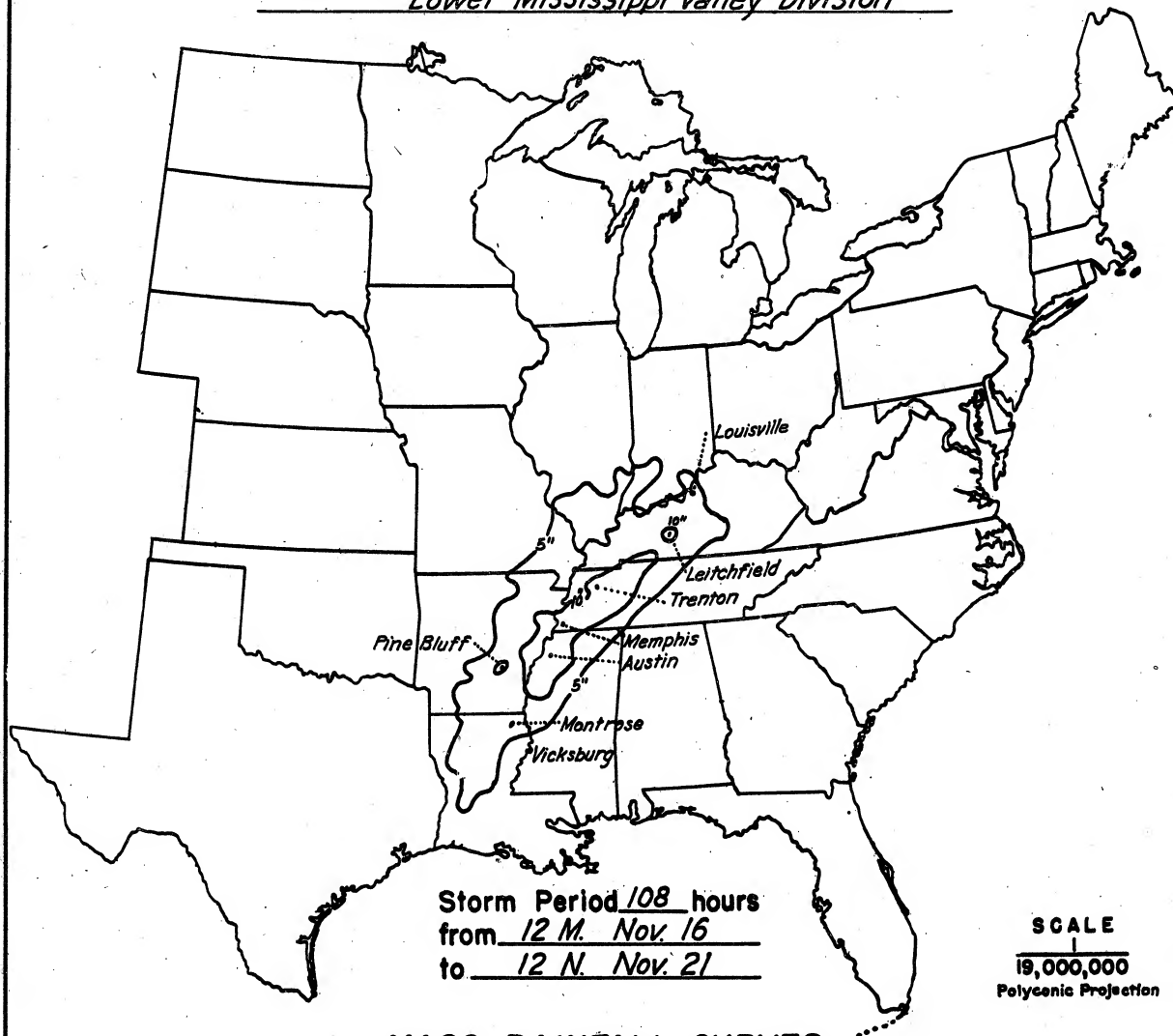
Form S-10 (Data from mass rainfall curves).....	6
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	10
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

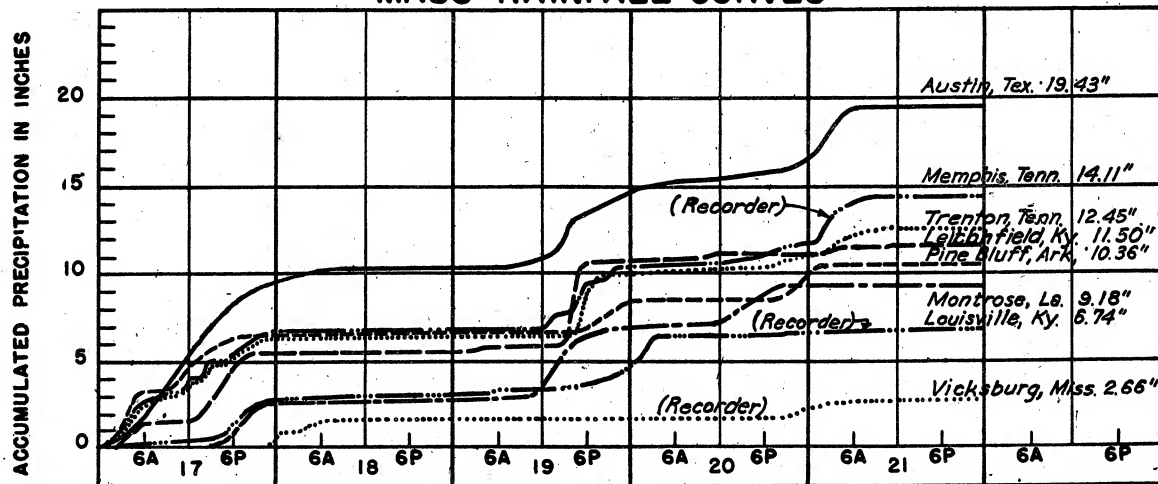
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	5.8	6.9	8.6	9.7	10.0	10.0	10.2	11.6	15.0	17.0	19.4
100	4.9	6.1	7.6	9.2	9.6	9.6	9.8	11.1	14.4	16.6	19.0
200	4.6	5.8	7.2	8.9	9.4	9.4	9.6	10.8	14.1	16.3	18.6
500	4.2	5.4	6.8	8.5	9.0	9.0	9.2	10.5	13.5	15.6	17.8
1,000	3.8	5.1	6.4	8.2	8.6	8.6	8.8	10.1	13.0	15.0	17.0
2,000	3.5	4.8	6.0	7.7	8.2	8.2	8.4	9.6	12.3	14.1	16.0
5,000	3.0	4.4	5.5	7.1	7.6	7.7	7.9	8.8	11.3	12.9	14.5
10,000	2.6	4.1	5.1	6.5	7.2	7.3	7.5	8.2	10.3	11.8	13.3
20,000	2.2	3.6	4.6	5.8	6.6	6.7	6.9	7.3	9.0	10.5	11.9
50,000	1.7	2.9	3.6	4.6	5.1	5.2	5.3	5.8	7.0	8.6	9.7
100,000	1.2	2.0	2.6	3.4	3.8	3.9	4.0	4.4	5.3	6.9	7.7
150,000	0.8	1.4	2.0	2.7	3.0	3.1	3.2	3.5	4.3	5.7	6.5

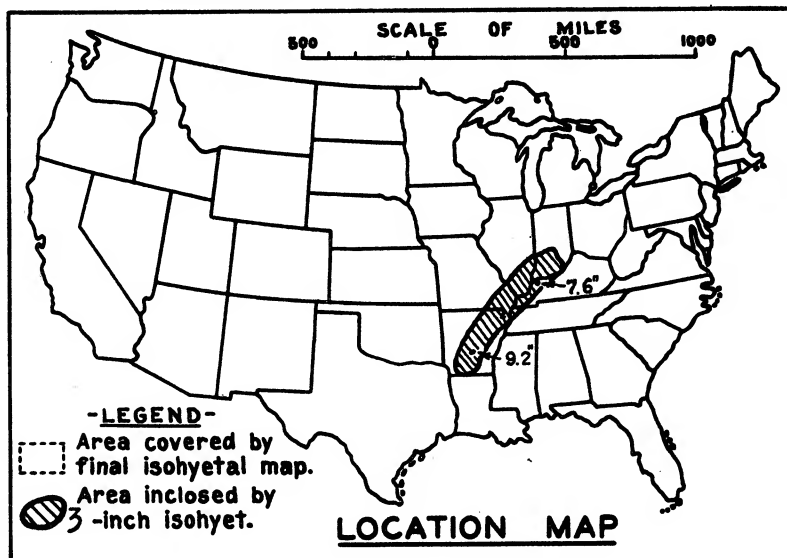
STORM STUDIES - ISOHYETAL MAP

Storm of November 17-21, 1906 Assignment LMV 1-4
 Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of January 1 - 3, 1907
 Assignment L M V 1 - 5
 Location Ark. Tenn. Mo. Ill. Ky.
 Study Prepared by: & Ind.

Lower Mississippi Valley
 Division

Memphis District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/30/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 1/23/45

Remarks: Centers at:
 Malvern, Ark. & Marion, Ky.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " ")-----	20
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	22

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

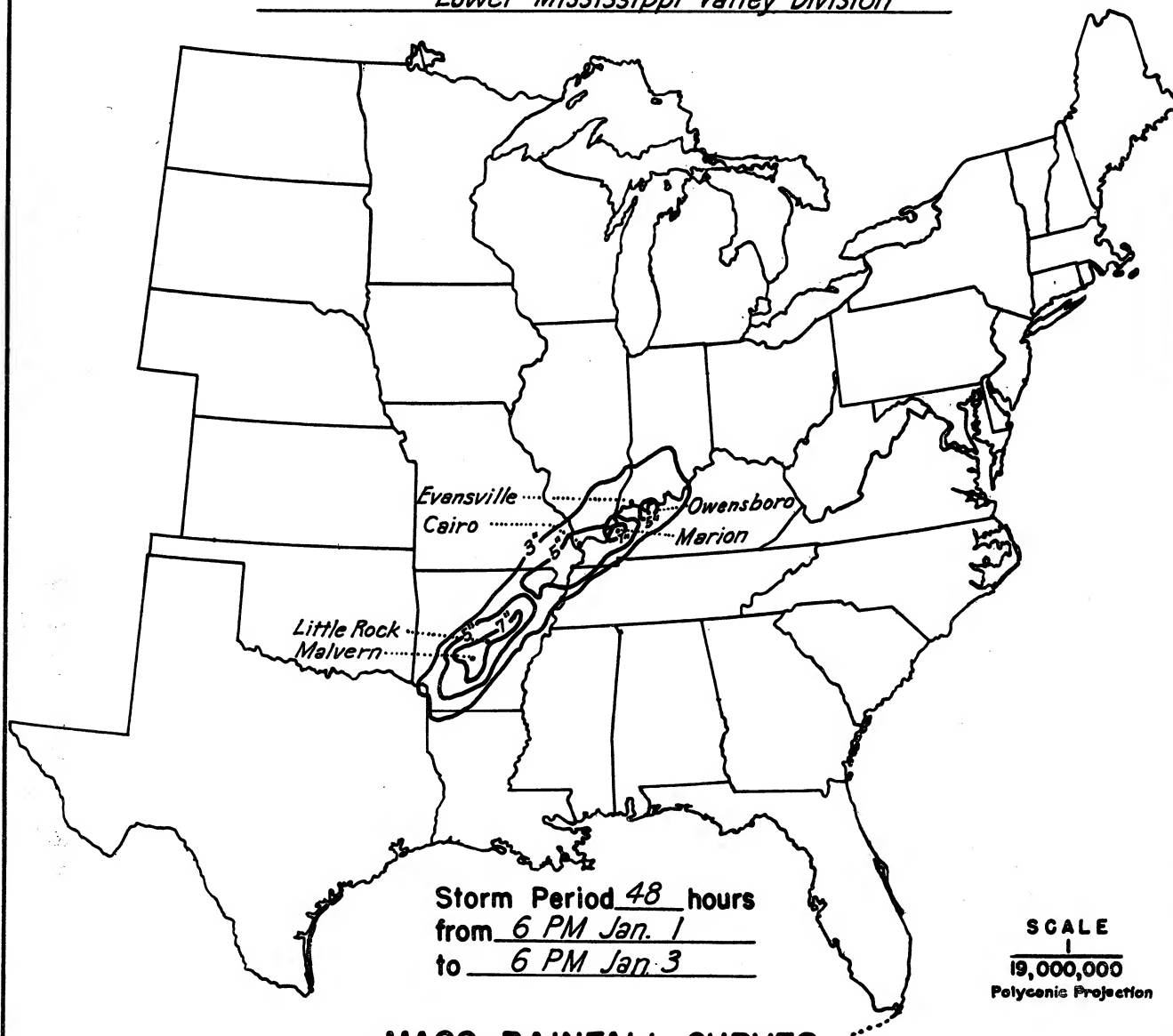
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

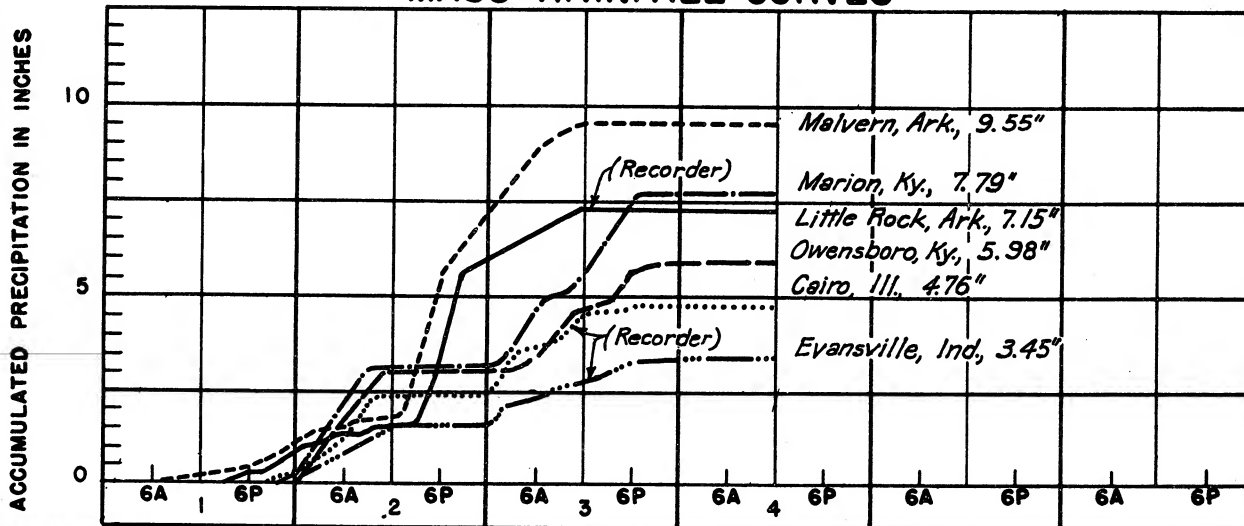
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

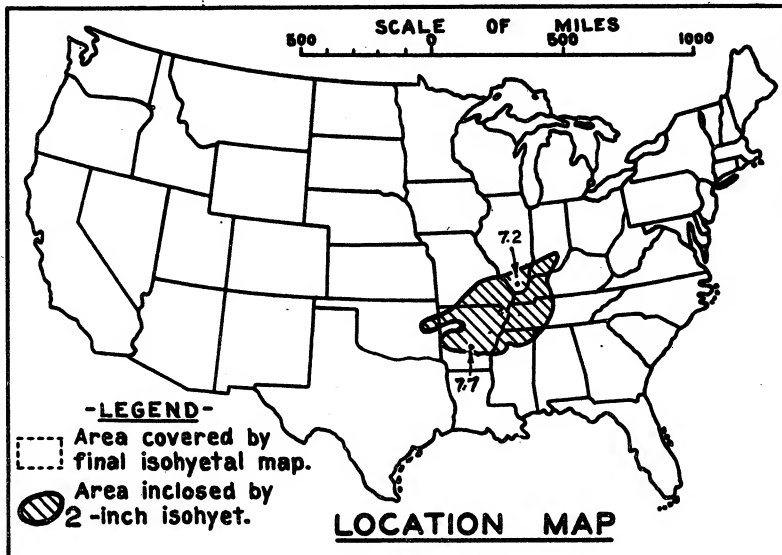
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48			
10	5.4	6.1	7.1	7.8	8.0	8.7	9.2			
100	4.8	5.8	7.0	7.6	7.8	8.3	9.0			
200	4.5	5.8	6.8	7.6	7.8	8.2	8.9			
500	4.2	5.6	6.6	7.4	7.6	7.9	8.7			
1,000	3.8	5.4	6.4	7.1	7.3	7.6	8.4			
2,000	3.6	5.2	6.1	6.8	7.0	7.3	8.1			
5,000	3.0	4.8	5.5	6.2	6.4	6.8	7.5			
10,000	2.6	4.3	4.9	5.5	5.9	6.3	7.0			
20,000	2.0	3.6	4.1	4.7	5.2	5.6	6.4			
50,000	1.2	1.9	2.4	3.0	3.8	4.3	5.2			
61,200	0.9	1.4	2.0	2.6	3.4	3.9	4.8			

STORM STUDIES - ISOHYETAL MAP

Storm of January 1-3, 1907 Assignment LMV 1-5Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of April 12 - 15, 1911
 Assignment LM V 1 - 8
 Location Arl. Tenn. Ky. & Ill.
 Study Prepared by:
 Lower Mississippi Division
 Memphis District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12/31/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/16/45
 Remarks: Centers at :
 Benton, Ark. New Burnside, Ill.
 Jackson, Tenn. & Brinkley, Ark.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	15
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	19

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

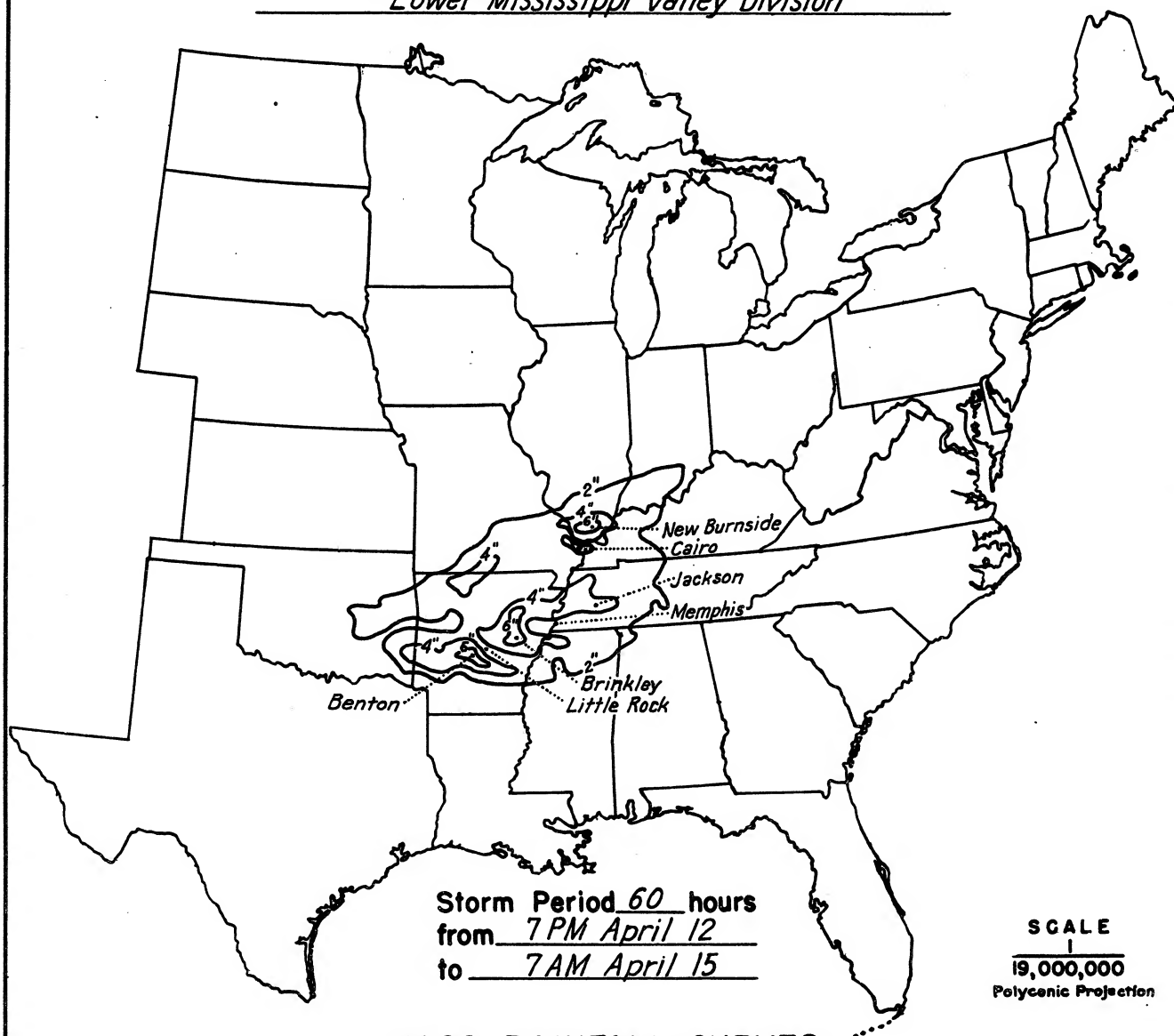
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

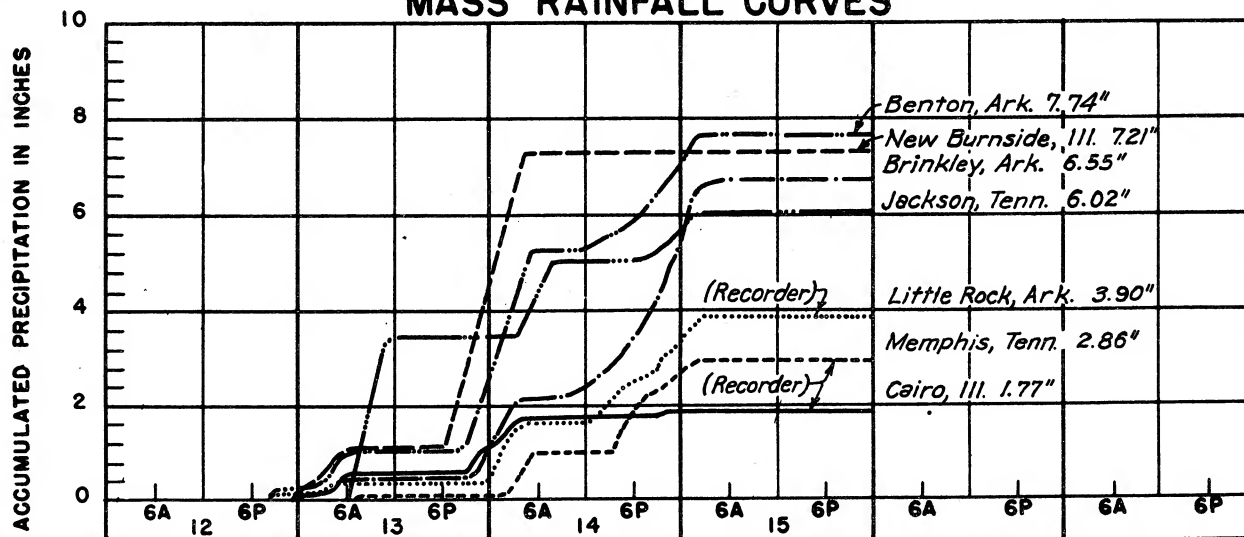
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	60	
10	4.9	6.2	6.2	6.2	7.1	7.2	7.2	7.7	
100	4.4	5.6	5.6	5.8	6.9	7.1	7.1	7.4	
200	4.2	5.3	5.3	5.6	6.7	7.0	7.0	7.1	
500	3.8	4.8	4.8	5.2	6.4	6.7	6.7	6.8	
1,000	3.5	4.4	4.4	4.9	6.0	6.4	6.4	6.4	
2,000	3.1	4.0	4.0	4.5	5.5	6.0	6.0	6.1	
5,000	2.6	3.4	3.4	4.0	4.8	5.3	5.5	5.6	
10,000	2.2	2.9	2.9	3.6	4.2	4.6	5.0	5.2	
20,000	1.8	2.4	2.4	3.1	3.6	4.0	4.5	4.7	
50,000	1.3	1.8	1.8	2.4	2.8	3.2	3.7	4.0	
75,000	1.0	1.5	1.5	2.0	2.5	2.8	3.3	3.7	

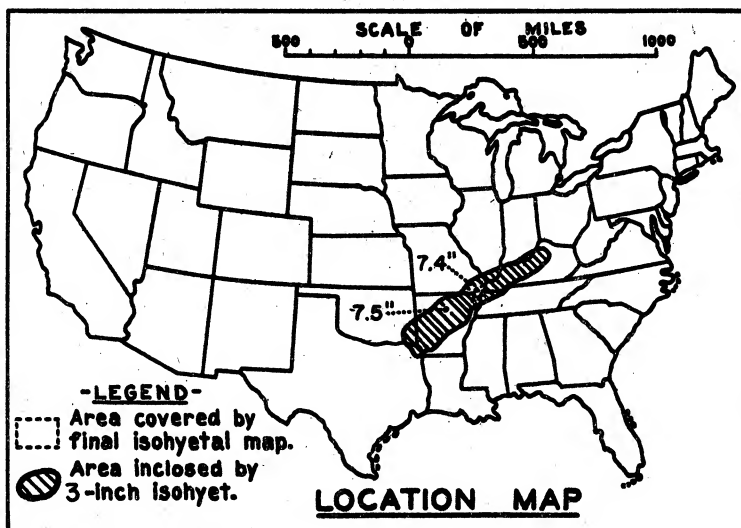
STORM STUDIES - ISOHYETAL MAP

Storm of April 12-15, 1911 Assignment LMV 1-8
Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 10-12 Jan. 1913

Assignment LMV 1-9

Location Ark., Ky. & Tenn.

Study Prepared by:

Lower Mississippi Valley
Division

Memphis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/28/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/10/47Remarks: Centers at Bee Branch,
Ark. and New Madrid, Mo.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	<u>7</u>
Form 5001-B (24-hour " " " ")-----	<u>-</u>
Form 5001-D (" " " " ")-----	<u>6</u>
Misc. precip. records, meteorological data, etc.-----	<u>-</u>
Form 5002 (Mass rainfall curves)-----	<u>17</u>

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

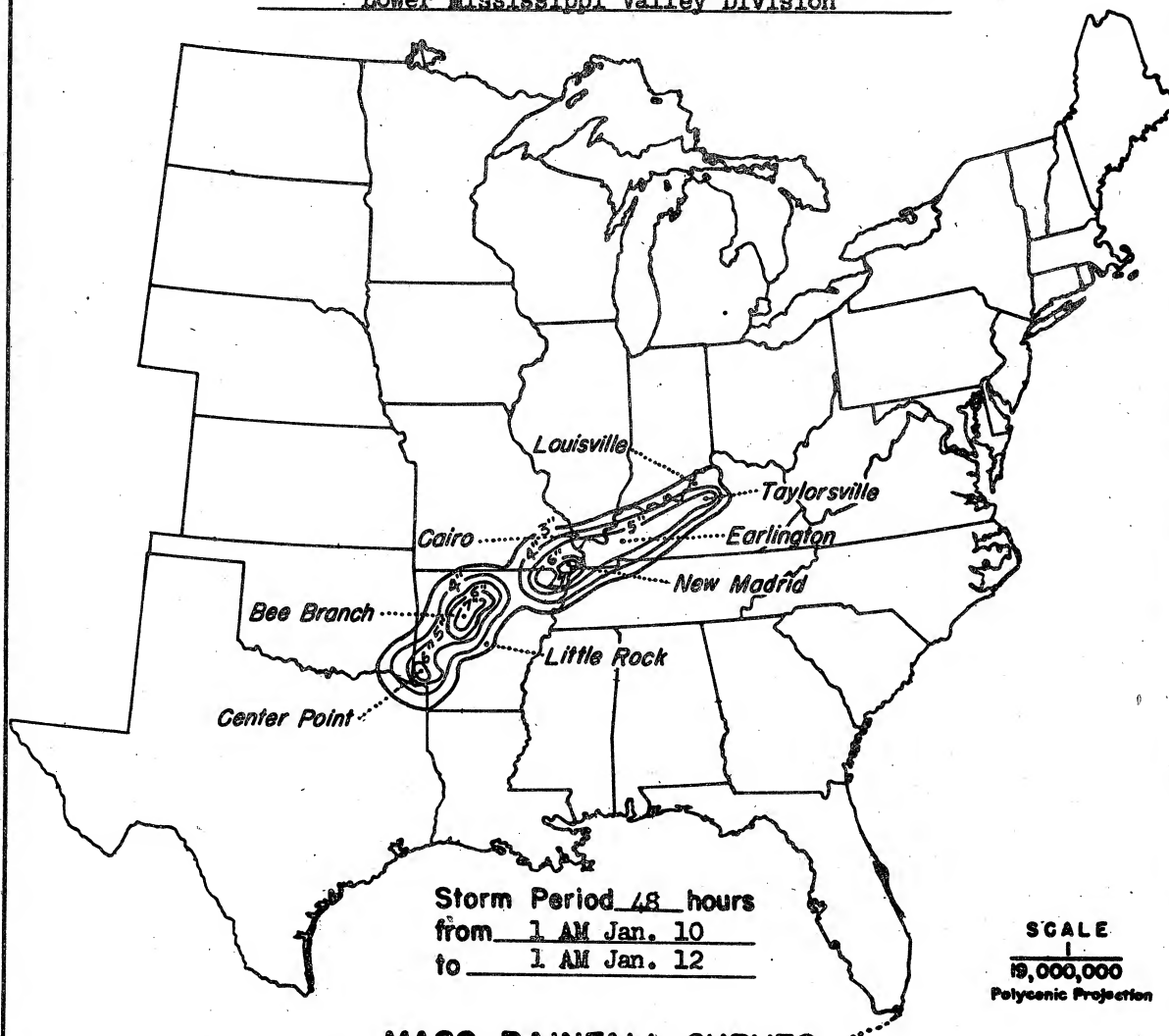
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	<u>3</u>
Form S-11 (Depth-area data from isohyetal map)-----	<u>1</u>
Form S-12 (Maximum depth-duration data)-----	<u>8</u>
Maximum duration-depth-area curves-----	<u>1</u>
Data relating to periods of maximum rainfall-----	<u>2</u>

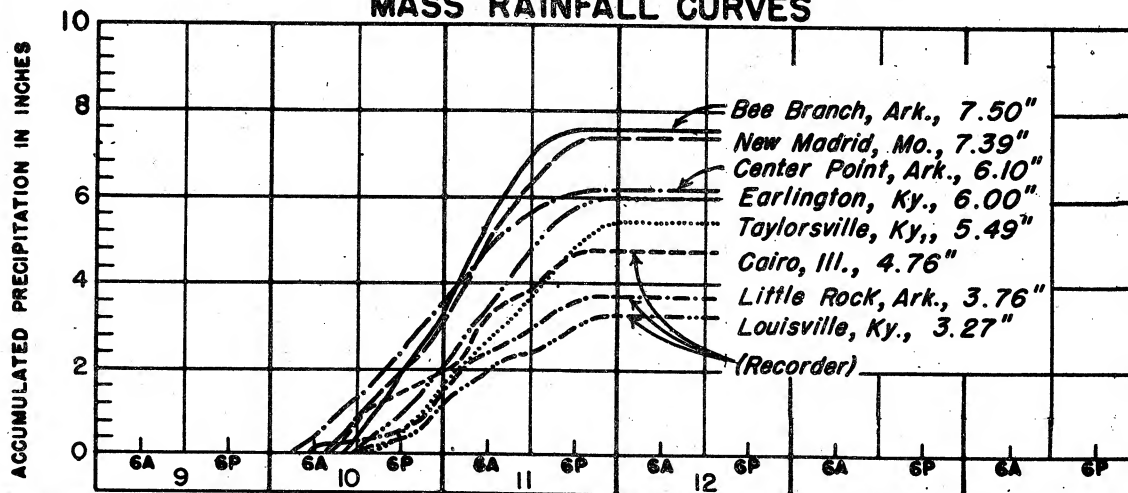
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

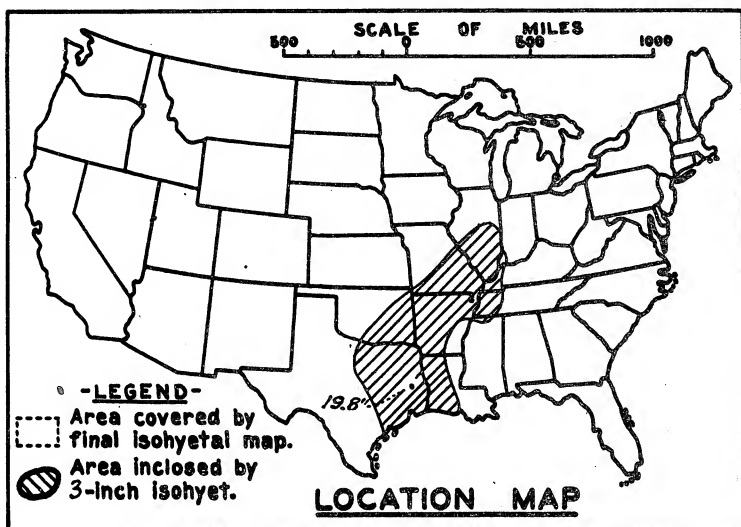
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	2.8	4.0	5.3	6.9	7.5	7.5	7.5					
100	2.5	3.8	5.0	6.5	7.2	7.3	7.5					
200	2.3	3.7	4.9	6.4	7.0	7.2	7.4					
500	2.2	3.6	4.8	6.2	6.8	7.1	7.3					
1,000	2.0	3.4	4.6	6.0	6.6	6.9	7.2					
2,000	1.9	3.3	4.3	5.7	6.4	6.7	7.0					
5,000	1.7	3.0	4.0	5.3	5.9	6.3	6.6					
10,000	1.5	2.8	3.7	4.9	5.6	6.0	6.3					
20,000	1.3	2.5	3.3	4.4	5.0	5.5	5.8					
50,000	1.0	1.9	2.7	3.6	4.1	4.6	4.9					
70,000	0.9	1.7	2.4	3.2	3.7	4.2	4.5					

STORM STUDIES - ISOHYETAL MAP

Storm of January 10-12, 1913 Assignment LMV 1-9Study Prepared by: Memphis, Tenn. DistrictLower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 16-21 August 1915

Assignment L M V 1-10

Location Tex. & Ark.

Study Prepared by:

Lower Mississippi Valley
Division

Memphis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2-4-41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12-20-45

Remarks:

Center at
San Augustine, Texas.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 30

Form 5001-B (24-hour " ")----- 60

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 63

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 7

Form S-11 (Depth-area data from isohyetal map)----- 3

Form S-12 (Maximum depth-duration data)----- 17

Maximum duration-depth-area curves----- 1

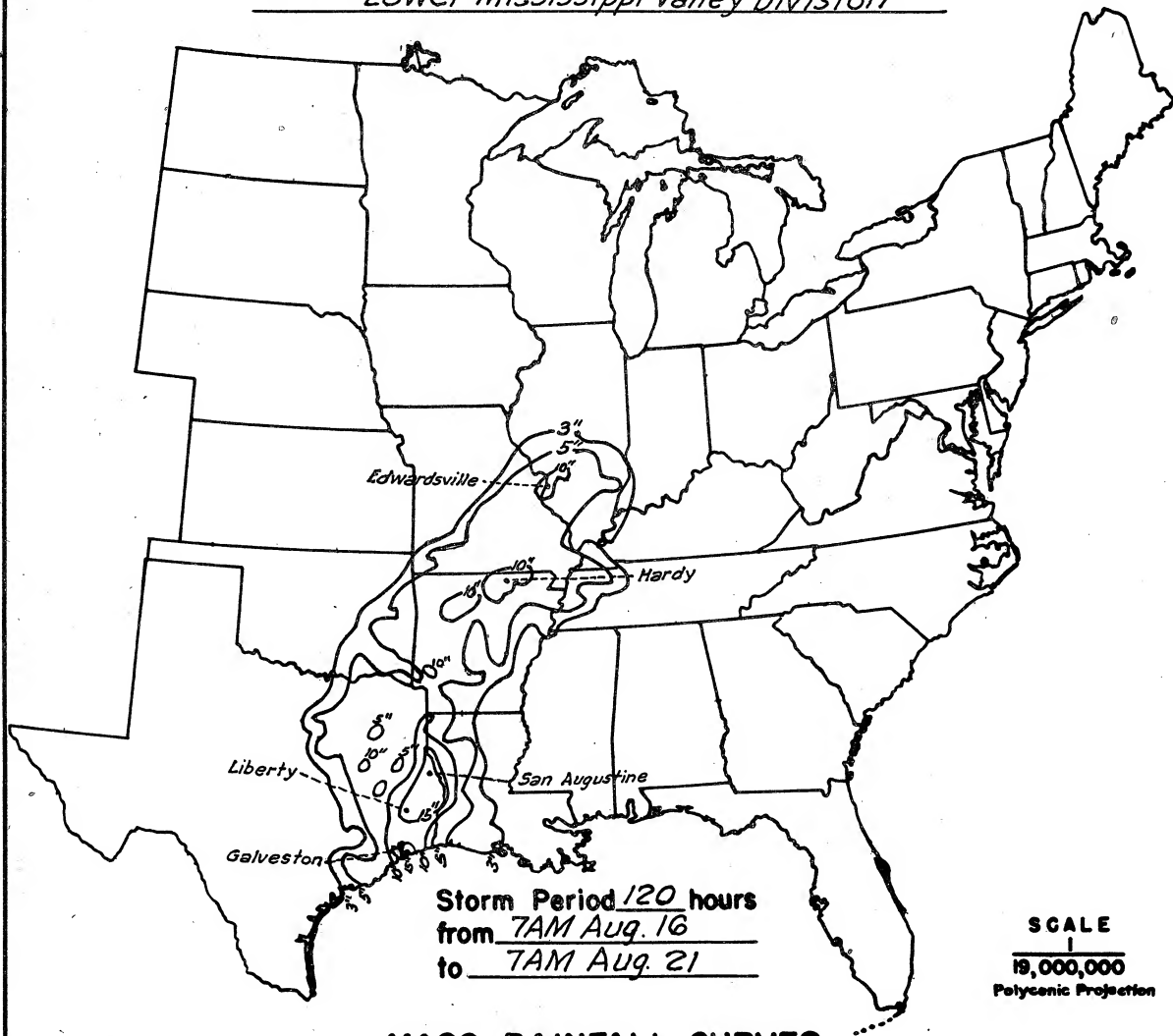
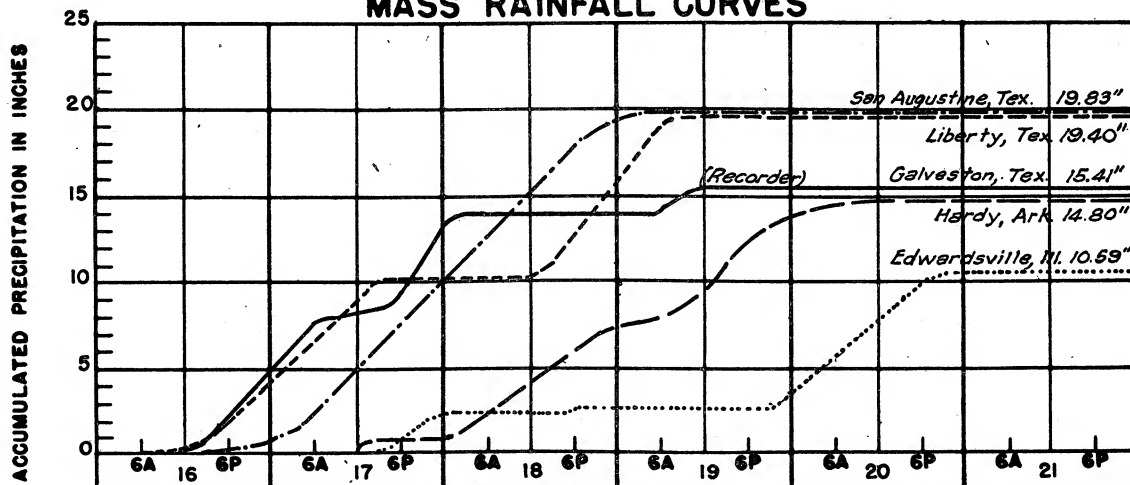
Data relating to periods of maximum rainfall----- 3

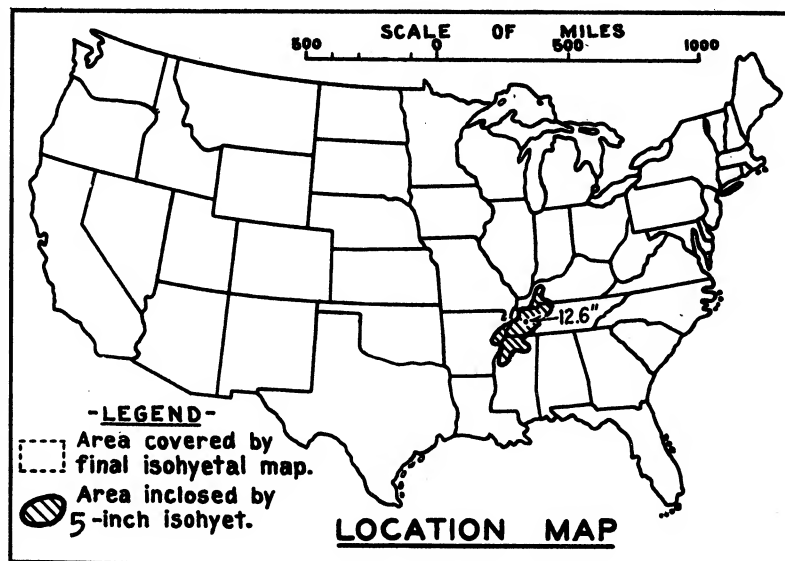
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	5.6	8.1	8.8	10.6	13.3	15.9	18.8	19.7	19.8	19.8	19.8
100	4.5	6.8	7.7	9.8	12.3	14.6	17.7	18.8	19.1	19.3	19.4
200	4.1	6.4	7.3	9.6	12.0	14.2	17.3	18.5	18.8	19.1	19.2
500	3.7	5.8	6.9	9.2	11.4	13.5	16.8	18.1	18.6	18.8	18.9
1,000	3.4	5.4	6.6	8.6	10.7	12.7	16.1	17.6	18.3	18.7	18.7
2,000	3.1	5.0	6.2	8.1	9.9	11.7	14.7	17.0	18.1	18.4	18.4
5,000	2.6	4.5	5.7	7.3	8.7	10.1	12.5	15.5	17.1	17.5	17.6
10,000	2.3	4.1	5.3	6.4	7.7	8.8	10.7	13.7	15.3	16.0	16.1
20,000	1.9	3.4	4.6	5.4	6.5	7.5	9.0	10.8	12.3	13.7	14.0
50,000	1.0	2.1	2.9	3.7	4.5	5.2	6.8	7.7	8.9	10.7	11.2
100,000	0.7	1.4	2.0	2.6	3.3	3.9	5.3	6.1	7.1	8.6	9.1
200,000	0.6	1.0	1.5	2.0	2.5	3.0	3.9	4.8	5.6	6.7	7.0

STORM STUDIES - ISOHYETAL MAP

Storm of August 16-21, 1915 Assignment LMV 140
 Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of March 15 - 17, 1919
 Assignment L M V 1 - 12
 Location Ark. Tenn. Ky. Miss.
 Study Prepared by: Ind. etc.
 Lower Mississippi Valley
 Division
 Memphis District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/17/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 1/20/45.
 Remarks: Centers at :
 Henderson, Tenn. and
 Batesville, Miss.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	20
Form 5001-B (24-hour " ")-----	37
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	39

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

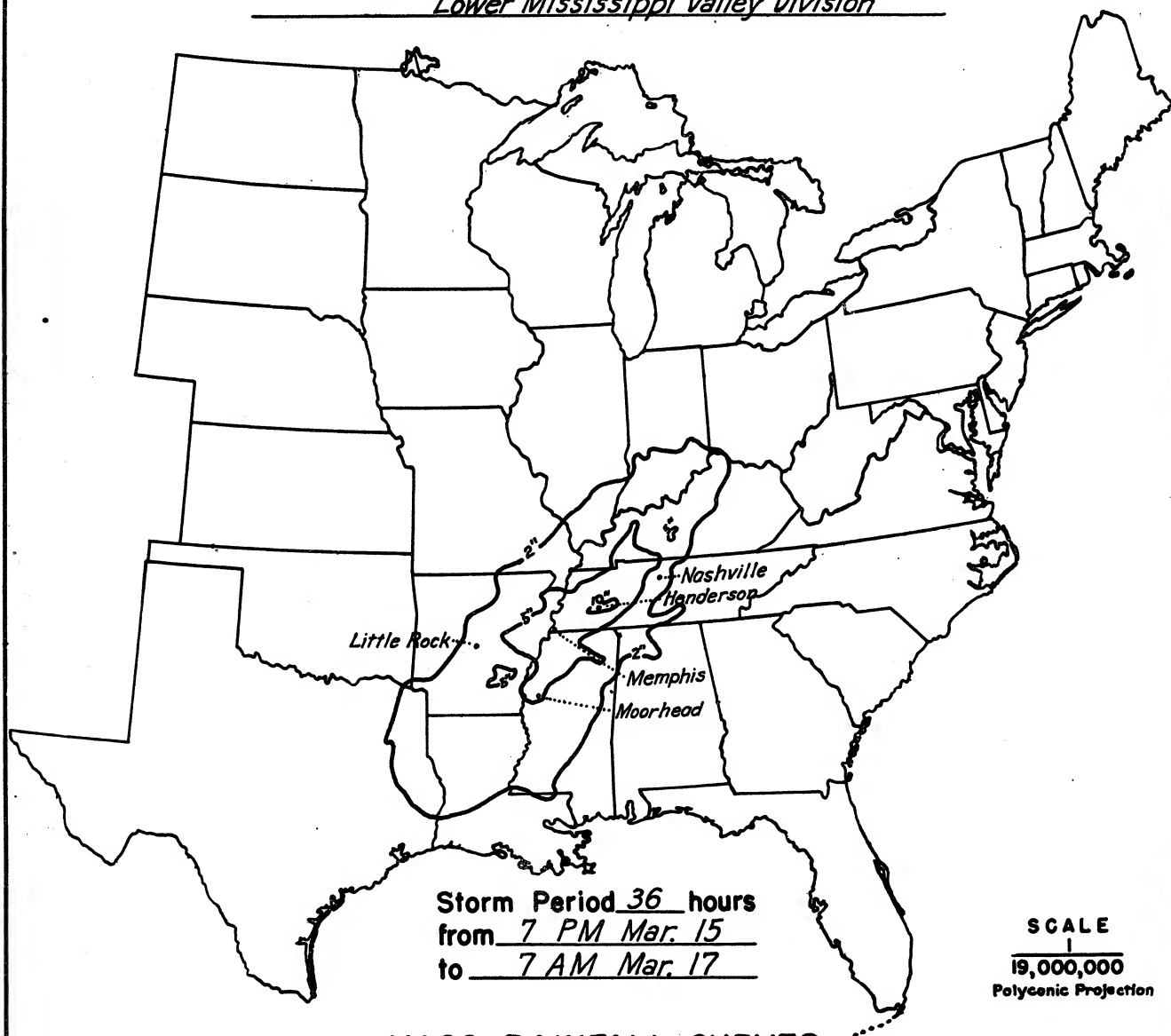
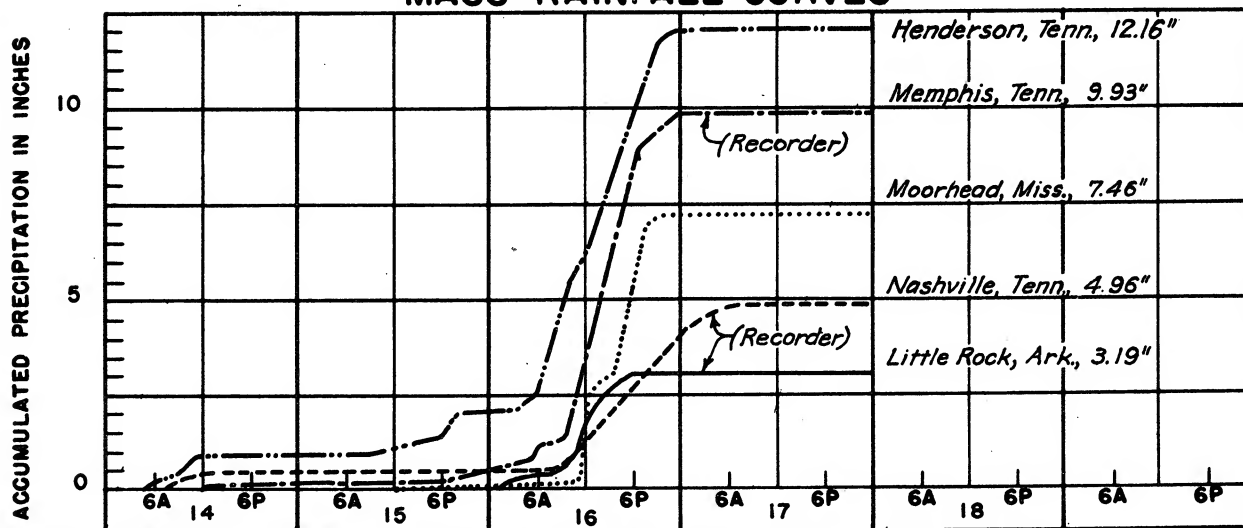
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	4

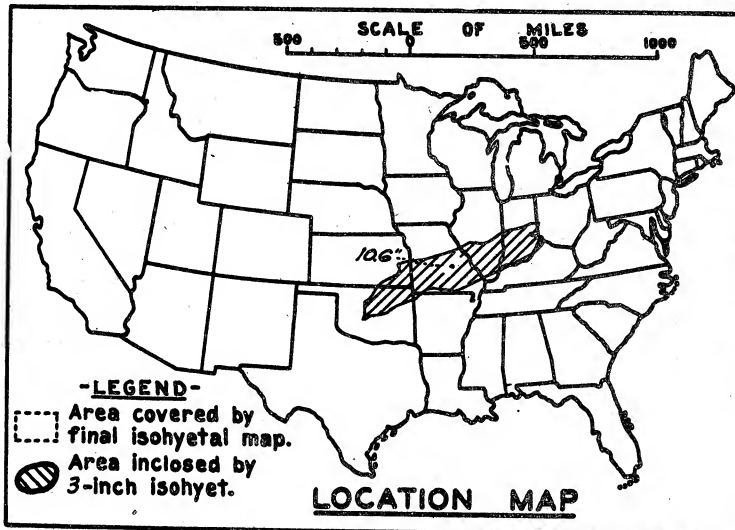
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36						
10	6.3	8.5	9.6	10.0	10.6	10.6						
100	5.6	8.0	9.4	9.9	10.4	10.4						
200	5.4	7.9	9.3	9.8	10.3	10.3						
500	5.1	7.6	9.0	9.6	10.1	10.1						
1,000	4.8	7.3	8.7	9.3	9.8	9.8						
2,000	4.4	6.9	8.4	9.0	9.5	9.5						
5,000	4.0	6.3	7.7	8.2	8.7	8.8						
10,000	3.6	5.7	6.9	7.4	7.8	8.0						
20,000	3.1	4.9	6.0	6.5	6.8	7.0						
50,000	2.3	3.6	4.7	5.0	5.3	5.5						
70,000	2.0	3.1	4.1	4.4	4.7	4.9						

STORM STUDIES - ISOHYETAL MAP

Storm of March 15-17, 1919 Assignment LMV 1-12
Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 25 - 28 Oct. 1919
 Assignment L M V 1 - 13A
 Location Okla., Kan., Mo., Ill., Ind.
 Study Prepared by:

Lower Mississippi Valley
 Division, - Memphis District
 Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/11/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/13/46

Remarks: Center at
 Steelville, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	28
Form 5001-B (24-hour " ")-----	63
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	67

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

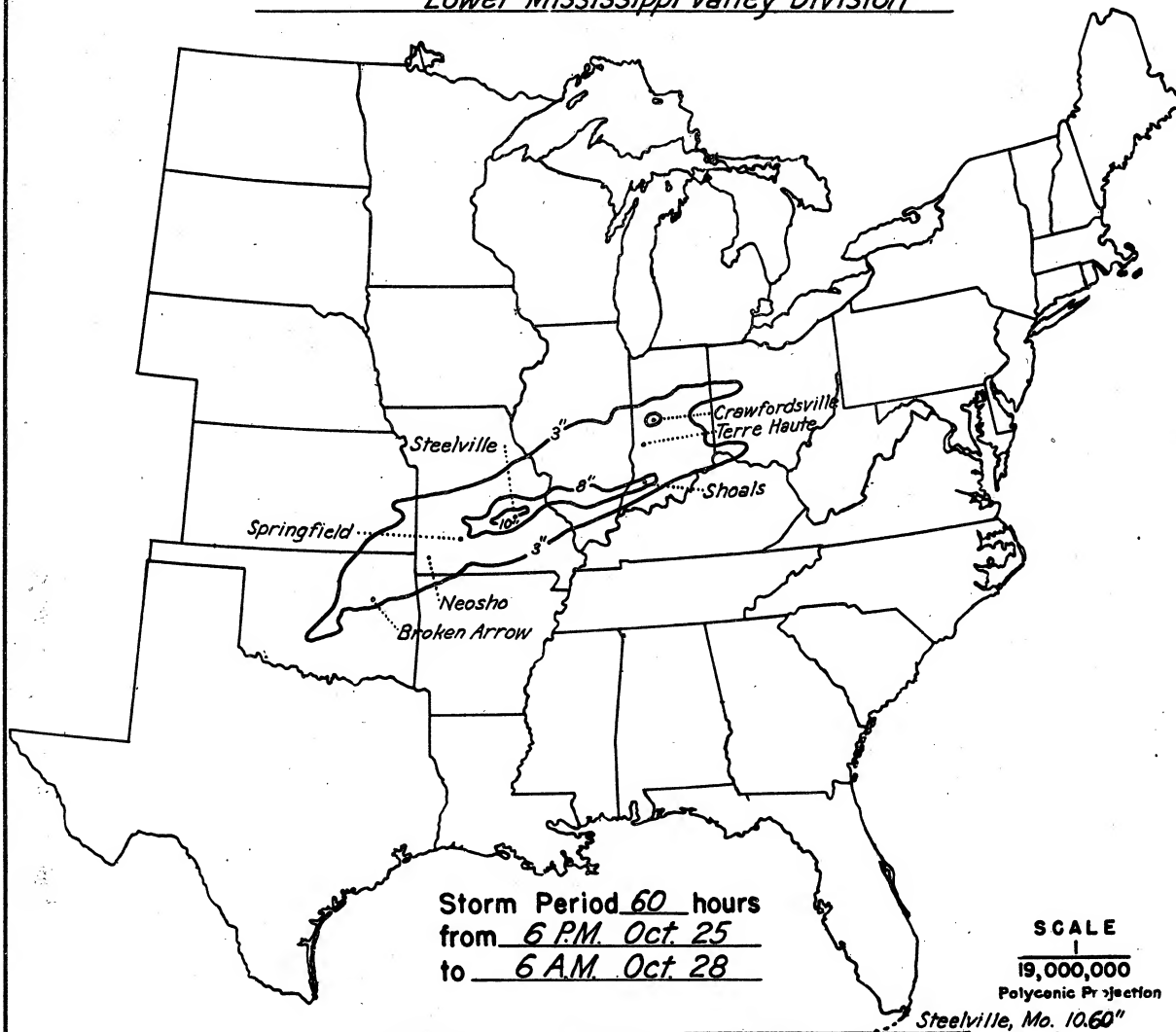
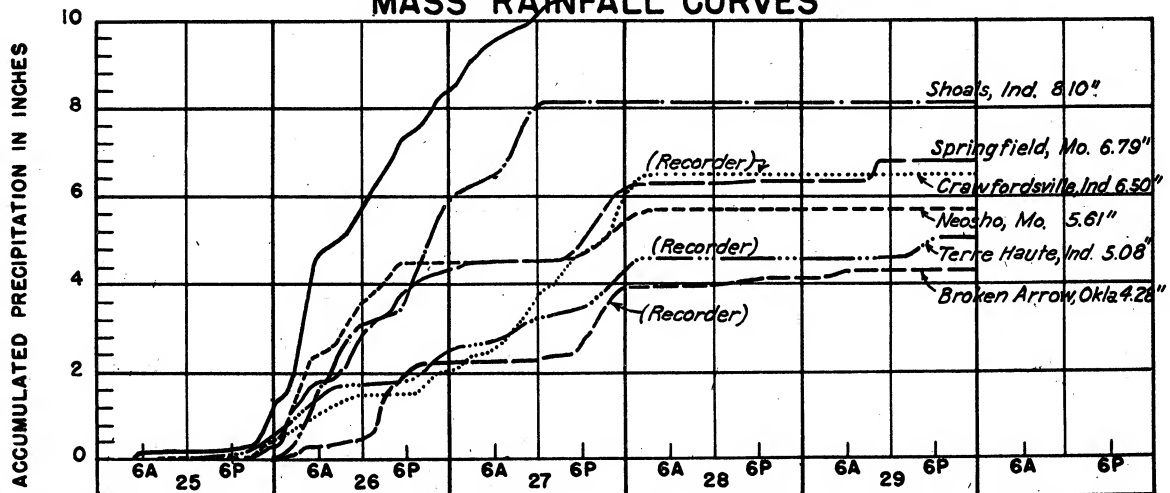
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

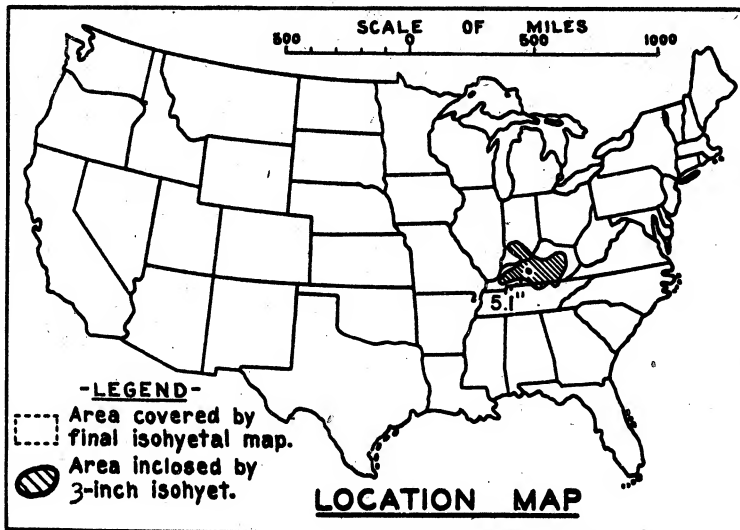
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60			
10	4.0	6.1	6.6	7.6	8.8	9.6	10.5	10.6			
100	3.8	5.6	6.4	7.4	8.5	9.4	10.4	10.5			
200	3.7	5.4	6.3	7.3	8.4	9.3	10.3	10.4			
500	3.5	5.0	6.0	7.1	8.1	9.1	10.1	10.2			
1000	3.3	4.6	5.7	6.8	7.8	8.8	9.9	10.0			
2000	2.9	4.1	5.2	6.4	7.3	8.4	9.5	9.6			
5000	2.4	3.4	4.4	5.7	6.6	7.8	8.8	9.0			
10000	2.0	2.9	3.8	5.0	5.9	7.0	8.1	8.3			
20000	1.6	2.4	3.2	4.2	5.0	6.0	7.1	7.5			
50000	1.0	1.6	2.3	3.0	3.7	4.4	5.5	6.1			
84000	0.7	1.2	1.8	2.3	2.9	3.4	4.5	5.1			

STORM STUDIES - ISOHYETAL MAP

Storm of October 25-28, 1919 Assignment LMV 1-13A
 Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 30 Oct.-1 Nov. 1919

Assignment LMV 1-13(B)

Location Kentucky

Study Prepared by:

Lower Mississippi Valley

Division

Memphis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/23/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/13/46

Remarks:- Center at

Leitchfield, Kentucky

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	28
Form 5001-B (24-hour " ")-----	63
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	67

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

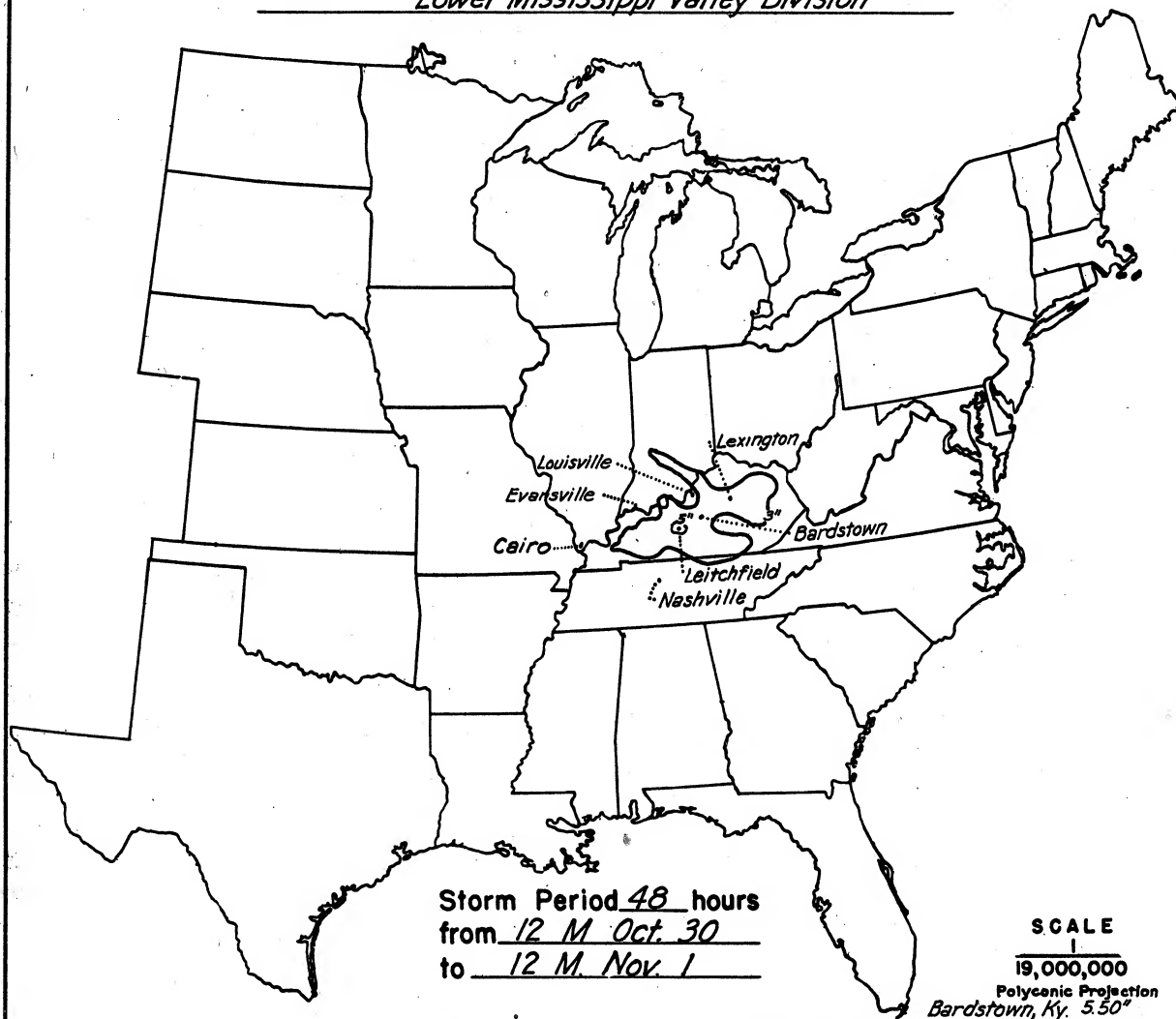
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	1
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

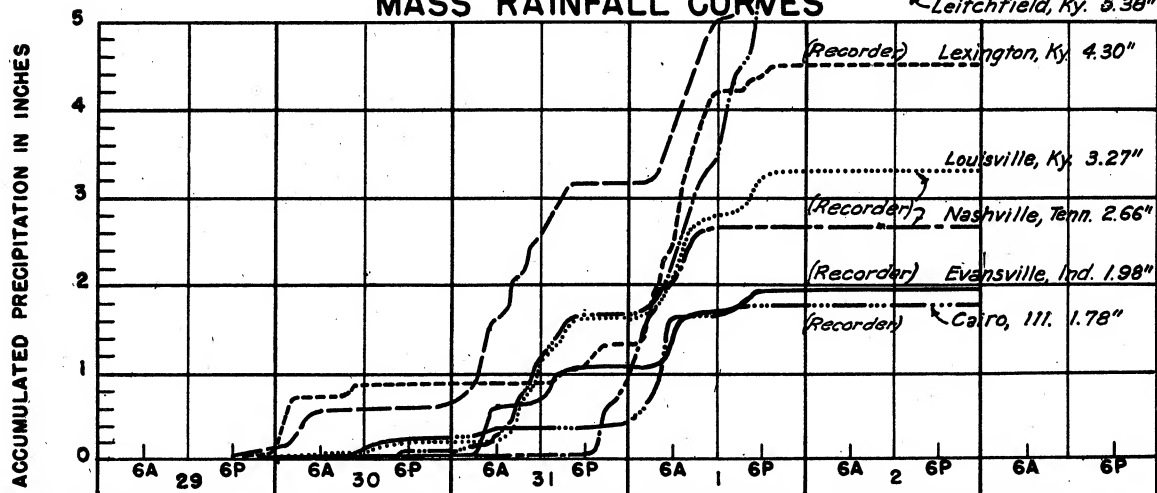
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

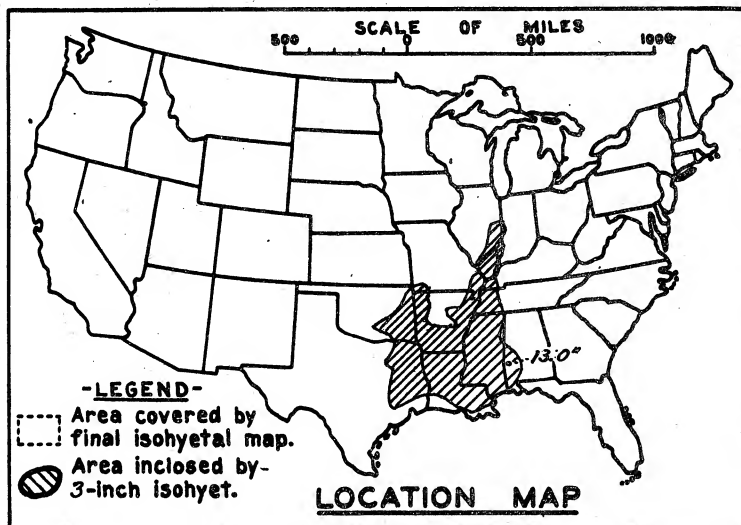
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	2.2	3.3	3.9	4.2	5.0	5.1	5.1					
100	1.9	3.0	3.6	4.1	4.7	5.0	5.1					
200	1.9	2.9	3.5	4.0	4.6	4.9	5.1					
500	1.7	2.7	3.3	3.9	4.4	4.8	5.1					
1,000	1.6	2.6	3.2	3.8	4.3	4.7	5.1					
2,000	1.5	2.5	3.0	3.7	4.1	4.5	5.0					
5,000	1.4	2.3	2.8	3.4	3.8	4.3	4.7					
10,000	1.2	2.2	2.7	3.3	3.6	3.9	4.3					
20,000	1.1	2.0	2.5	3.0	3.3	3.5	3.9					

STORM STUDIES - ISOHYETAL MAP

Storm of October 30 - November 1, 1919 Assignment LMV I-13 BStudy Prepared by: Memphis, Tenn. DistrictLower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 19-21 November 1934

Assignment LMV 1-18

Location Miss., La., Ark., Tenn.,

Study Prepared by: Ill., & Texas

Lower Mississippi Valley

Division

Memphis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6-21-43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12-4-45Remarks: Center at
Millry, Ala.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 52

Form 5001-B (24-hour " ")----- 88

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 91

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 8

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 3

Maximum duration-depth-area curves----- 1

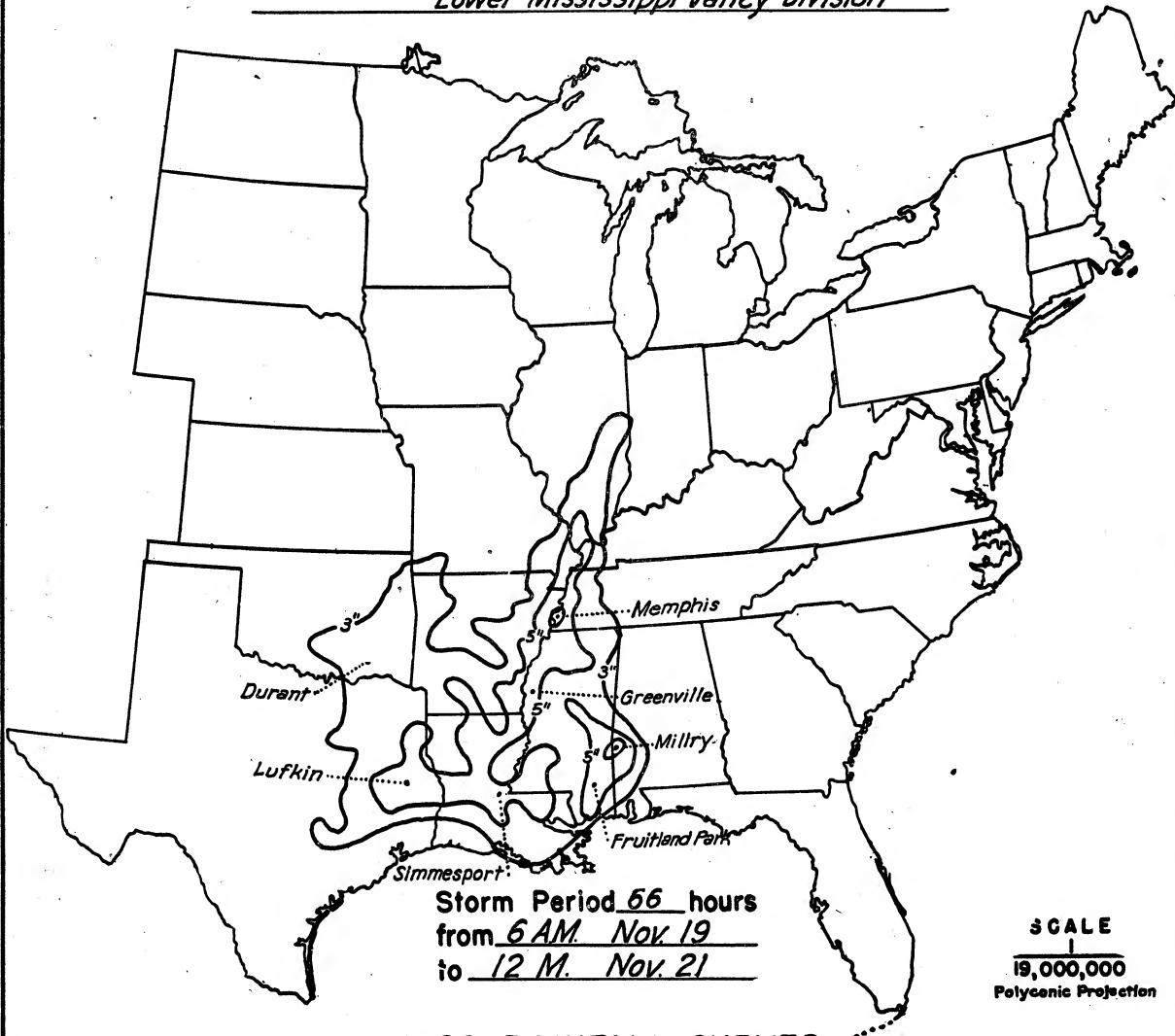
Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

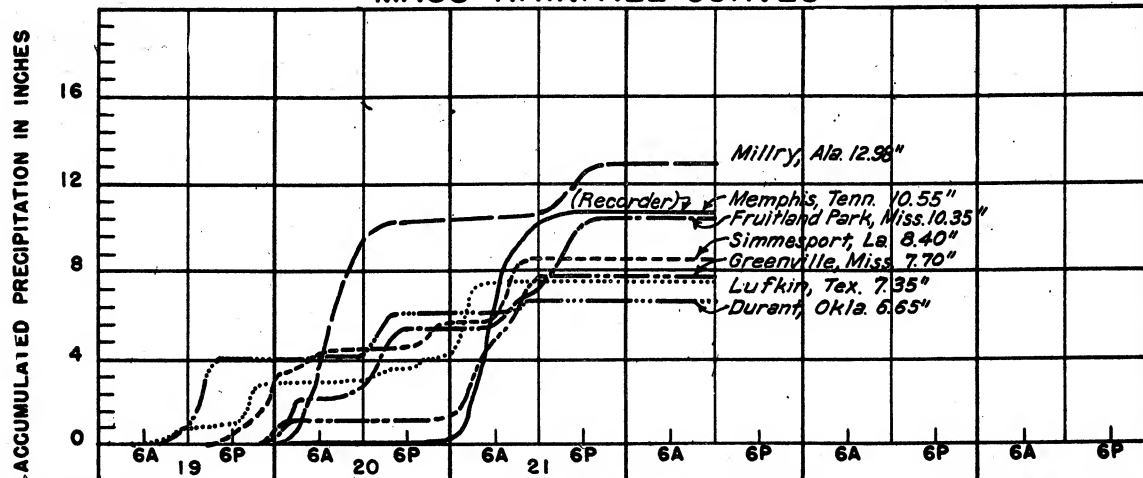
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	66	
10	7.0	9.8	10.5	10.5	10.5	10.6	13.0	13.0	13.0	
100	6.2	9.4	10.0	10.1	10.1	10.2	12.3	12.3	12.3	
200	5.8	9.1	9.8	9.9	9.9	9.9	11.9	11.9	11.9	
500	5.2	8.6	9.3	9.4	9.4	9.4	11.3	11.3	11.3	
1,000	4.7	8.1	8.8	9.0	9.0	9.0	10.7	10.7	10.7	
2,000	4.3	7.5	8.3	8.5	8.5	8.5	10.0	10.0	10.0	
5,000	3.6	6.6	7.3	7.6	7.7	7.7	9.0	9.1	9.1	
10,000	3.1	5.7	6.4	6.8	6.9	7.0	8.1	8.4	8.4	
20,000	2.6	4.8	5.5	6.0	6.1	6.2	7.2	7.6	7.6	
50,000	1.8	3.5	4.2	4.7	4.9	5.1	5.9	6.4	6.5	
100,000	1.3	2.5	3.2	3.8	4.0	4.2	5.0	5.5	5.6	
130,000	1.1	2.1	2.8	3.4	3.7	3.9	4.6	5.2	5.3	

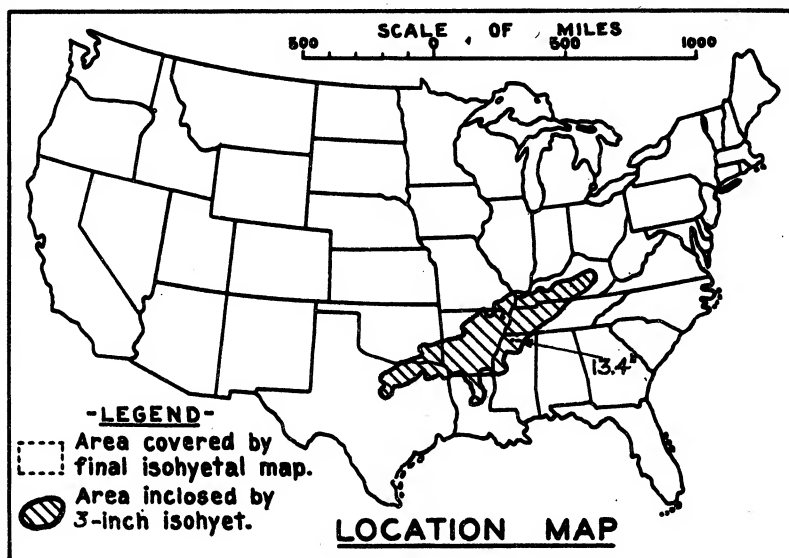
STORM STUDIES - ISOHYETAL MAP

Storm of November 19-21, 1934 Assignment LMV 1-18
 Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of January 18-21, 1935

Assignment L M V 1 - 19

Location Ark., Miss., Ky., & Tenn.

Study Prepared by:

Lower Mississippi Valley
Division

Memphis, Tenn. District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11-4-42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7-27-45

Remarks: Center at:

Hernando, Miss.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	38
Form 5001-B (24-hour " " " ").....	64
Form 5001-D (" " " " " ").....	0
Misc. precip. records, meteorological data, etc.....	0
Form 5002 (Mass rainfall curves).....	67

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

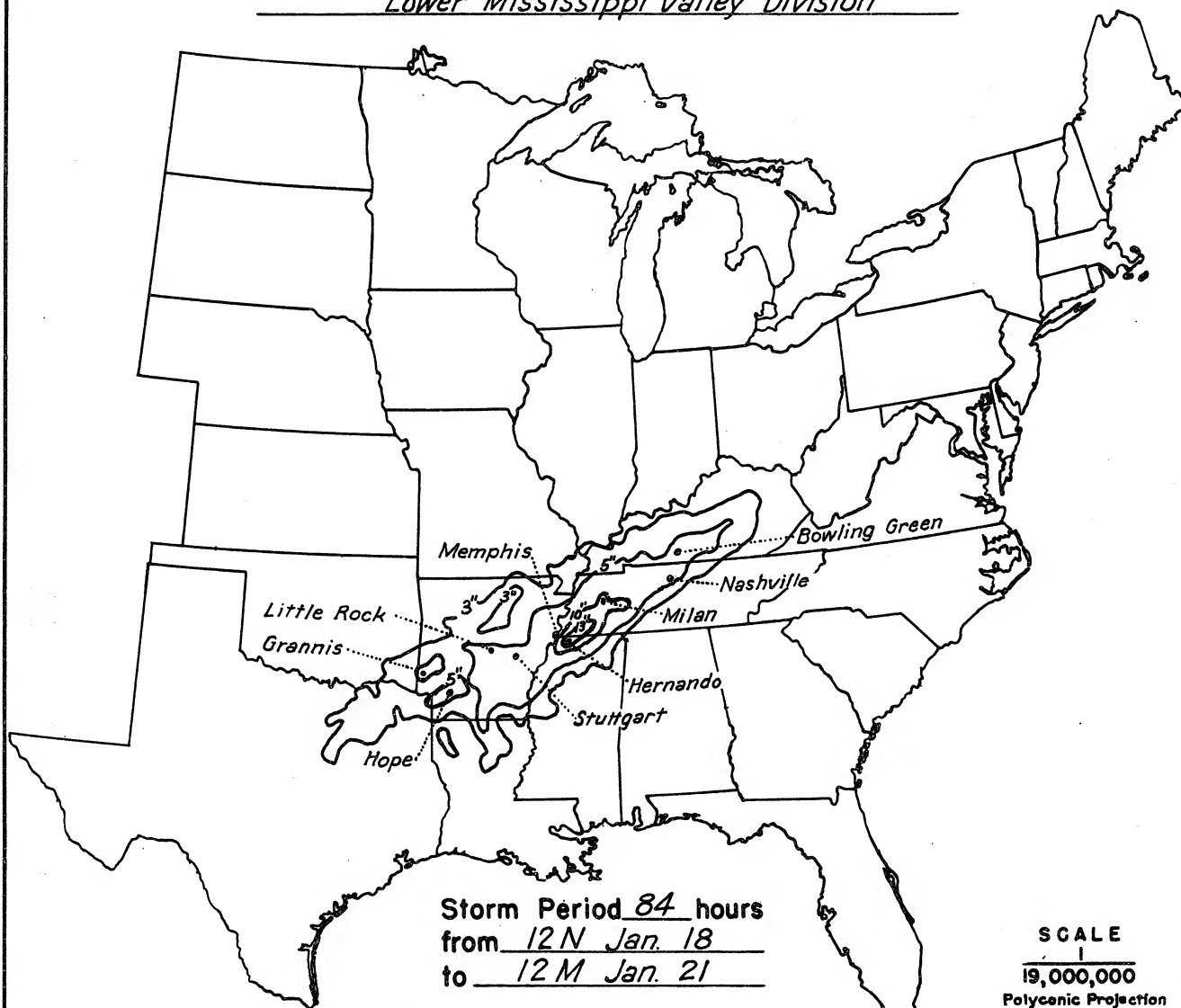
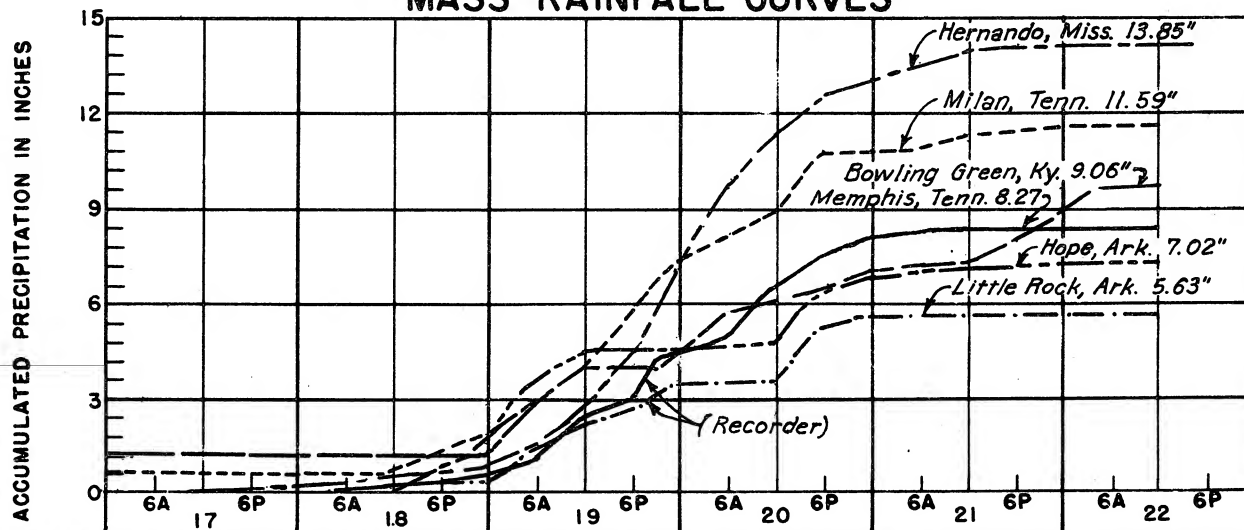
Form S-10 (Data from mass rainfall curves).....	5
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	7
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

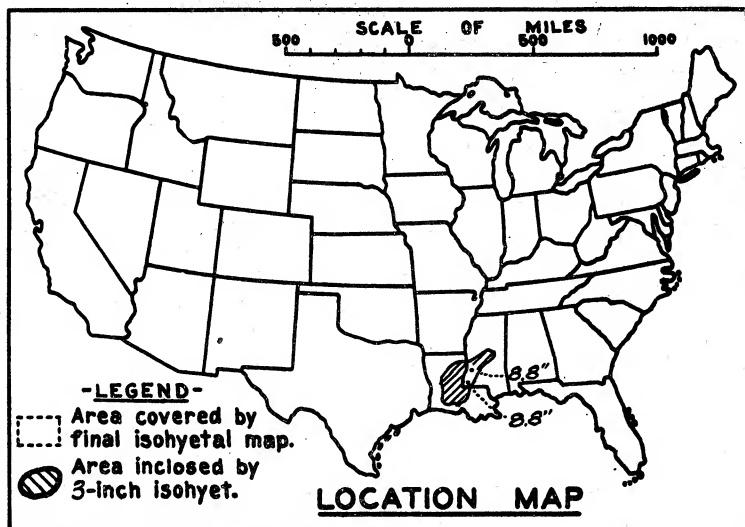
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	3.8	5.1	7.2	9.0	10.2	11.1	12.4	13.2	13.4	13.4
100	3.3	5.1	6.9	8.5	9.8	10.9	12.2	12.8	13.2	13.3
200	3.0	5.1	6.8	8.4	9.7	10.8	12.0	12.6	13.1	13.3
500	2.7	5.0	6.6	8.1	9.4	10.5	11.7	12.3	12.8	13.1
1,000	2.5	4.8	6.4	7.9	9.1	10.1	11.3	11.9	12.5	12.8
2,000	2.2	4.4	6.0	7.4	8.6	9.5	10.7	11.4	11.9	12.2
5,000	1.9	3.8	5.3	6.4	7.7	8.4	9.7	10.3	10.8	11.1
10,000	1.6	3.2	4.6	5.5	6.7	7.4	8.6	9.2	9.7	10.0
20,000	1.4	2.6	3.8	4.6	5.6	6.2	7.4	8.0	8.4	8.6
50,000	1.0	1.8	2.6	3.2	4.0	4.6	5.7	6.2	6.5	6.8
98,500	0.7	1.2	1.7	2.2	2.8	3.3	4.3	4.8	5.1	5.4

STORM STUDIES - ISOHYETAL MAP

Storm of January 18-21, 1935 Assignment LMV 1-19
Study Prepared by: Memphis, Tenn. District
Lower Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 8-11 Dec. 1899

Assignment L M V 2-4

Location Miss. & La.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10-9-44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12-5-45

Remarks: Centers at

Port Gibson and Woodville,
Mississippi**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	5
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	4
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	13

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

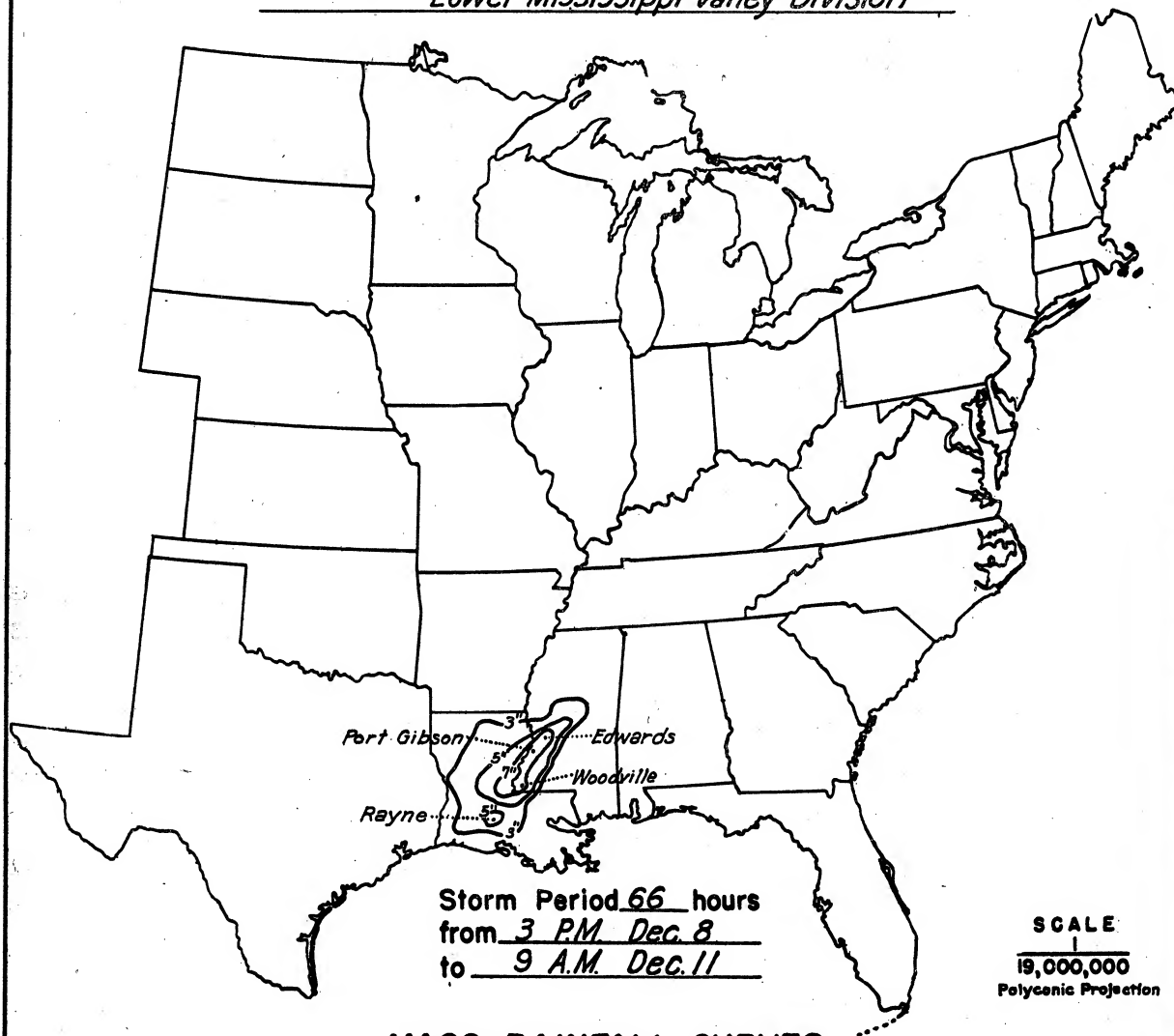
Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	7
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

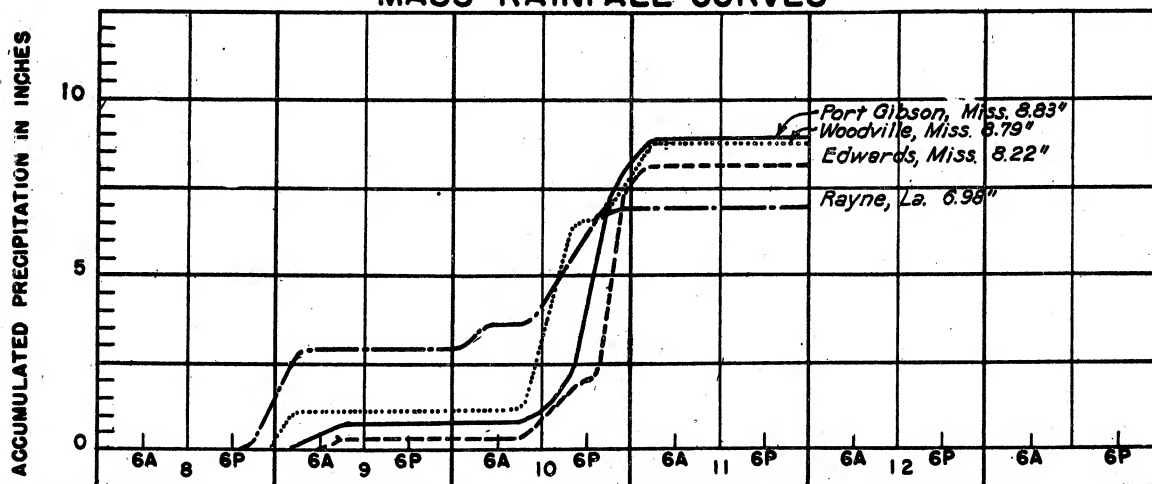
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	66		
10	5.7	6.9	7.8	7.8	7.8	7.8	8.6	8.8	8.8		
100	5.4	6.7	7.7	7.8	7.8	7.8	8.5	8.7	8.7		
200	5.3	6.6	7.6	7.7	7.7	7.7	8.4	8.6	8.6		
500	5.0	6.3	7.4	7.5	7.5	7.5	8.2	8.4	8.4		
1,000	4.8	6.0	7.2	7.3	7.3	7.3	8.0	8.2	8.2		
2,000	4.4	5.7	6.9	7.0	7.1	7.1	7.7	8.0	8.0		
5,000	3.9	5.2	6.4	6.6	6.6	6.6	7.1	7.5	7.5		
10,000	3.4	4.7	5.8	5.9	6.0	6.0	6.3	6.8	6.8		
20,000	2.7	3.9	4.7	4.8	4.8	4.8	5.1	5.8	5.8		
30,000	1.9	3.0	3.9	3.9	4.0	4.0	4.3	5.0	5.0		

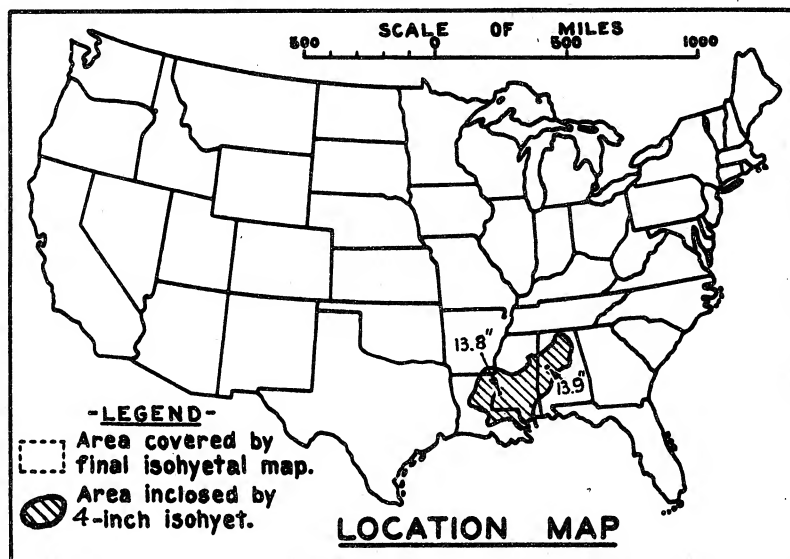
STORM STUDIES - ISOHYETAL MAP

Storm of December 8-11, 1899 Assignment LMV 2-4
Study Prepared by: Vicksburg Miss District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of April 15-18, 1900

Assignment L M V 2 - 5

Location Ala., Miss., & La.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 1-31-45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10-1-45

Remarks:

Centers at Eutaw, Ala.,
& Natchez, Mississippi**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	14
Form 5001-B (24-hour " ")-----	31
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	31

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

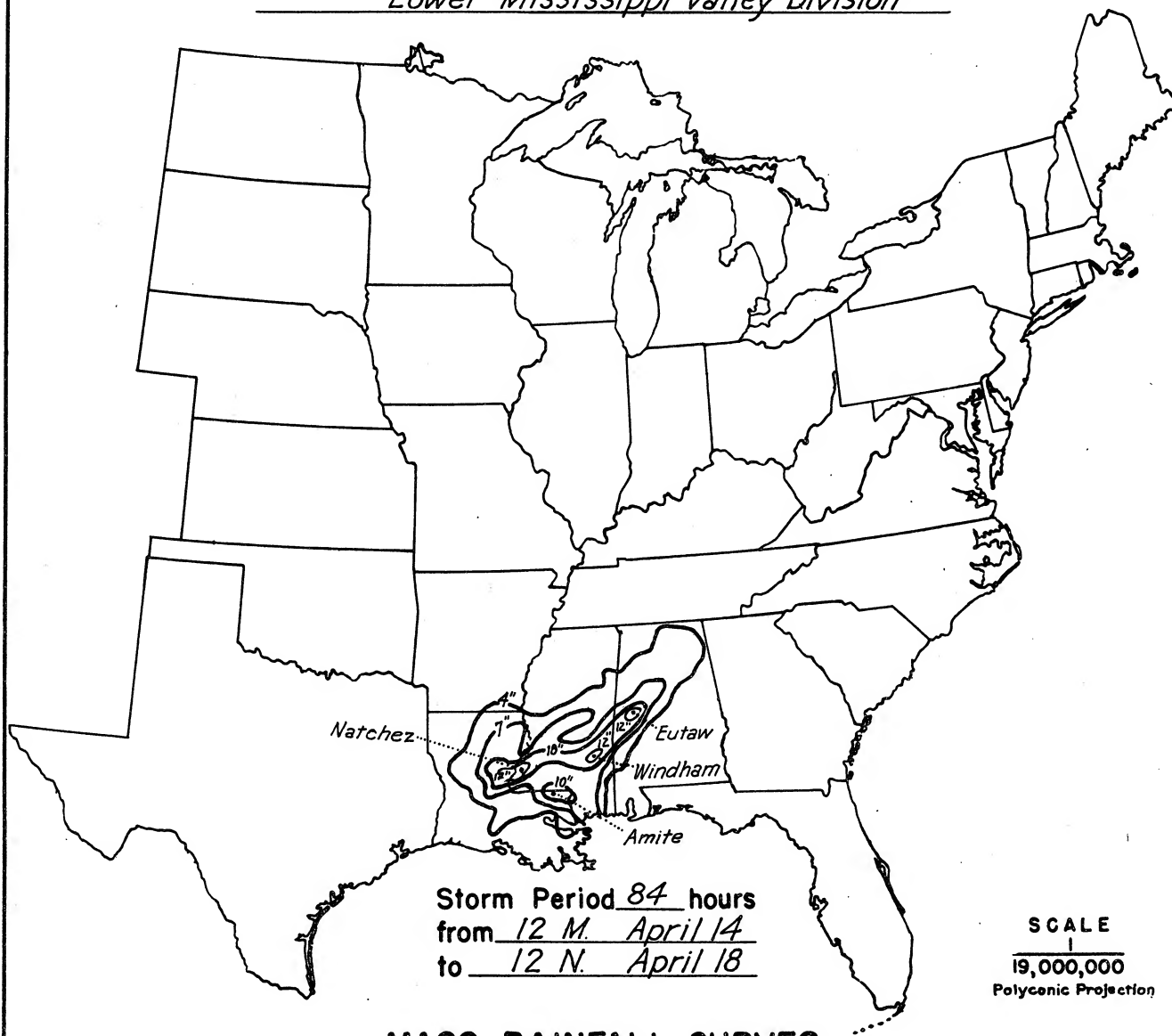
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

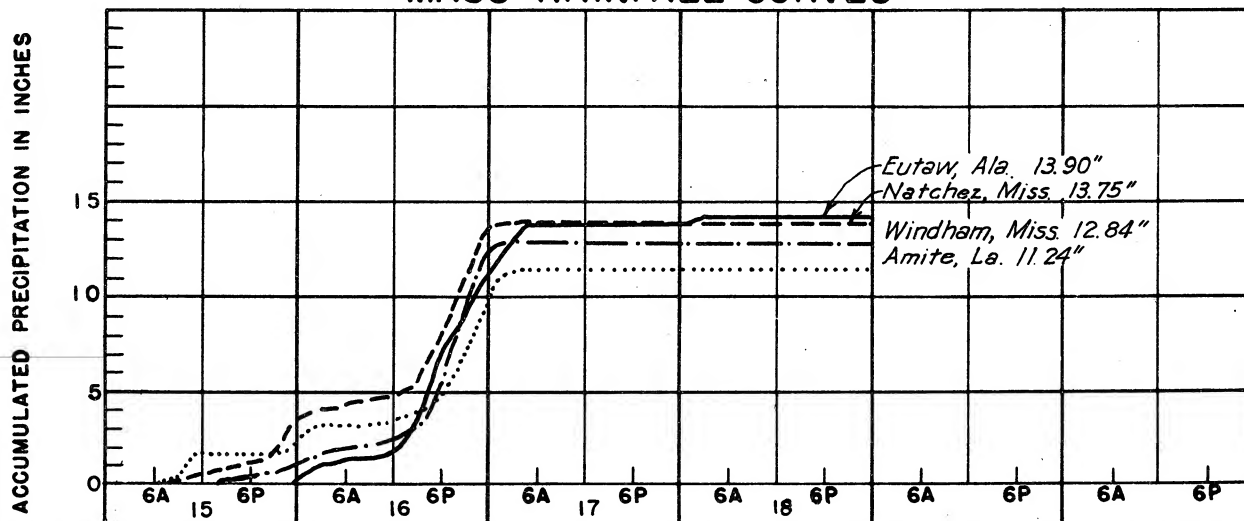
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	7.6	9.9	12.2	12.6	13.7	13.9	13.9	13.9	13.9	13.9
100	6.7	9.8	11.9	12.4	13.4	13.6	13.6	13.7	13.7	13.7
200	6.4	9.7	11.7	12.2	13.2	13.4	13.4	13.5	13.5	13.5
500	5.9	9.5	11.3	11.8	12.8	13.1	13.1	13.2	13.2	13.2
1,000	5.5	9.1	10.8	11.3	12.3	12.6	12.7	12.8	12.8	12.8
2,000	5.1	8.5	10.1	10.8	11.7	12.1	12.3	12.5	12.5	12.5
5,000	4.3	7.5	9.0	9.9	10.7	11.3	11.7	11.8	11.8	11.8
10,000	3.7	6.6	8.0	8.9	9.8	10.3	11.0	11.1	11.1	11.1
20,000	3.1	5.7	6.9	7.8	8.5	9.1	9.9	10.2	10.2	10.2
50,000	2.2	4.2	5.1	5.9	6.6	7.1	7.8	8.3	8.3	8.3
75,000	1.8	3.5	4.3	5.0	5.6	6.1	6.7	7.1	7.2	7.2

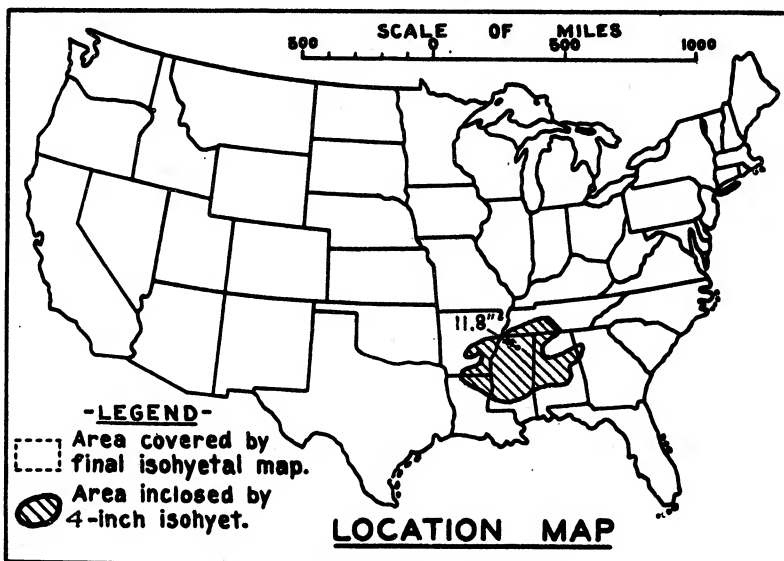
STORM STUDIES - ISOHYETAL MAP

Storm of April 15-18, 1900 Assignment LMV 2-5
Study Prepared by: Vicksburg, Miss District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of March 25-29, 1902

Assignment L M V 2 - 7

Location Miss. & Tenn.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11-30-44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10-1-45

Remarks:

Center at
Ripley, Miss.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 10
 Form 5001-B (24-hour " ")----- 32
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 32

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

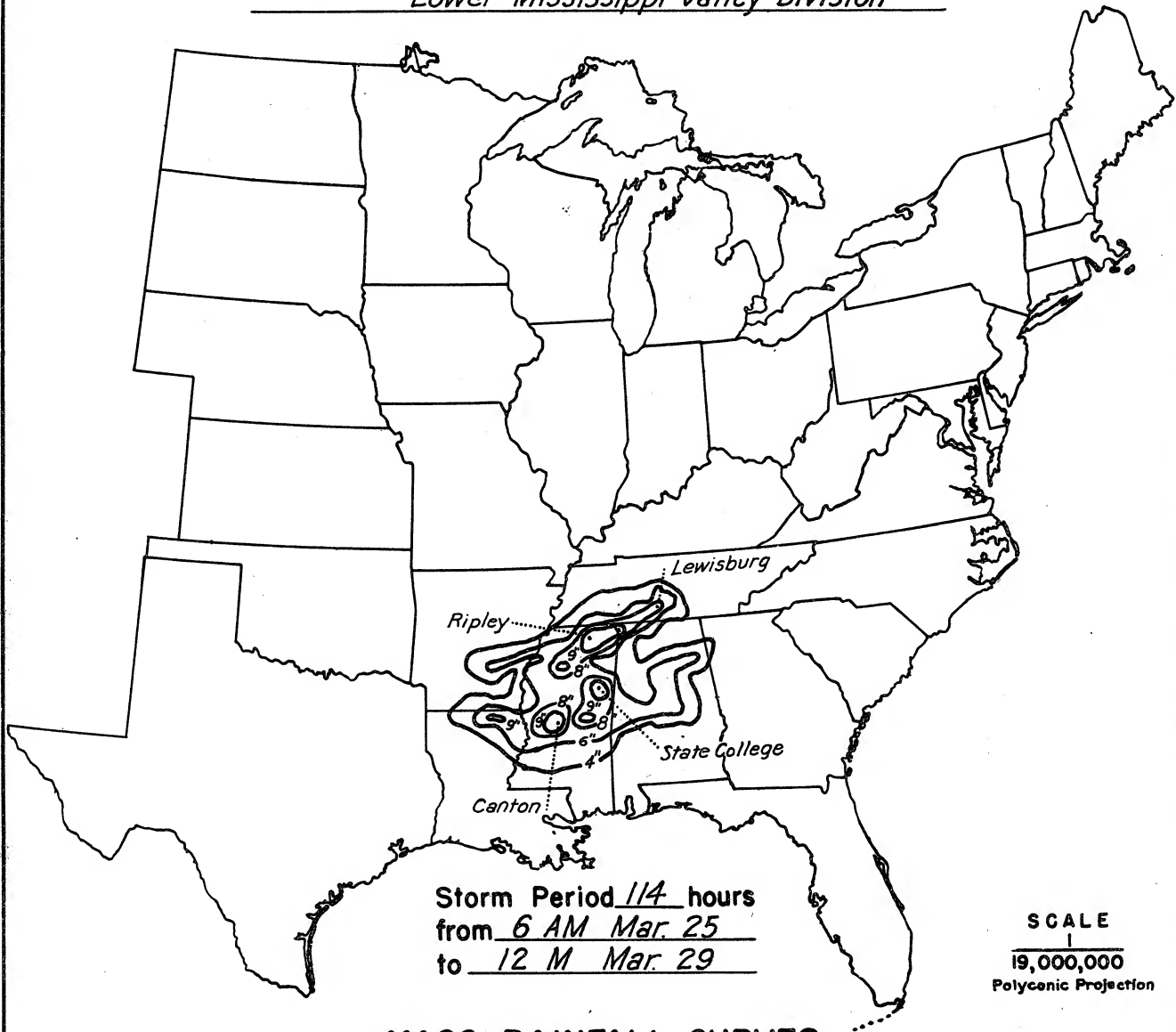
Form S-10 (Data from mass rainfall curves)----- 5
 Form S-11 (Depth-area data from isohyetal map)----- 2
 Form S-12 (Maximum depth-duration data)----- 10
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

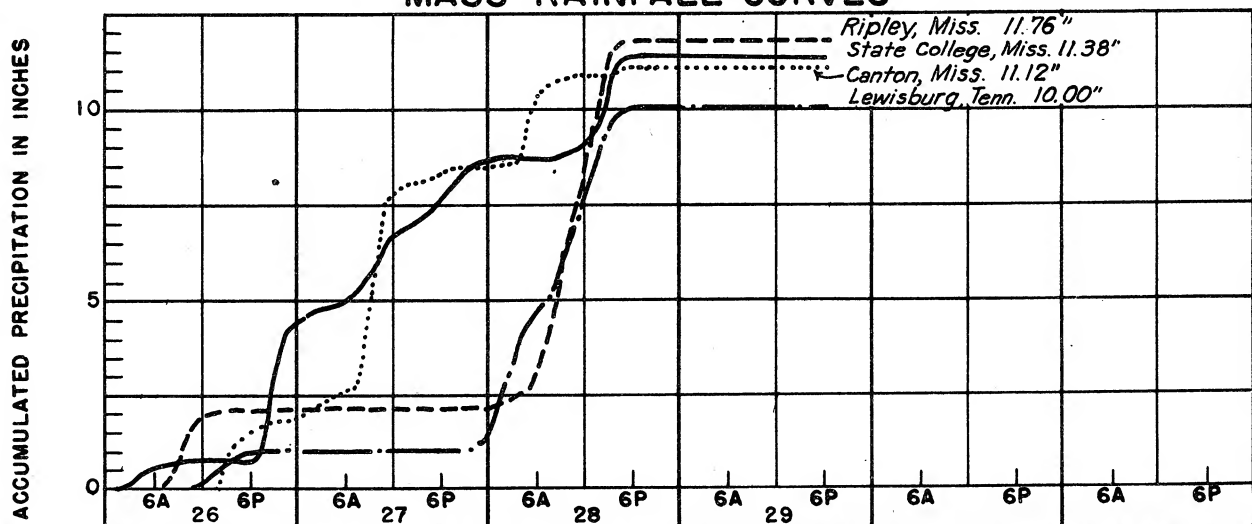
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	6.2	9.1	9.6	9.7	9.7	9.7	10.8	11.8	11.8	11.8	11.8
100	5.6	8.3	9.1	9.2	9.2	9.2	10.5	11.2	11.2	11.2	11.2
200	5.4	8.1	8.9	9.1	9.1	9.1	10.4	11.1	11.1	11.1	11.1
500	5.1	7.8	8.7	8.9	8.9	8.9	10.1	10.8	10.8	10.8	10.8
1,000	4.9	7.4	8.4	8.6	8.6	8.6	9.6	10.4	10.4	10.5	10.5
2,000	4.6	6.9	8.0	8.2	8.2	8.2	9.0	9.8	9.9	10.0	10.0
5,000	3.7	5.9	7.3	7.5	7.5	7.5	8.3	9.0	9.2	9.3	9.3
10,000	3.0	4.8	6.1	6.3	6.5	6.7	7.8	8.5	8.7	8.8	8.8
20,000	2.3	3.8	4.9	5.2	5.4	5.9	7.2	7.9	8.1	8.2	8.2
50,000	1.4	2.5	3.3	3.7	4.0	4.8	6.3	7.0	7.2	7.3	7.3
100,000	0.7	1.4	2.0	2.6	2.8	3.8	5.0	5.7	6.0	6.1	6.1

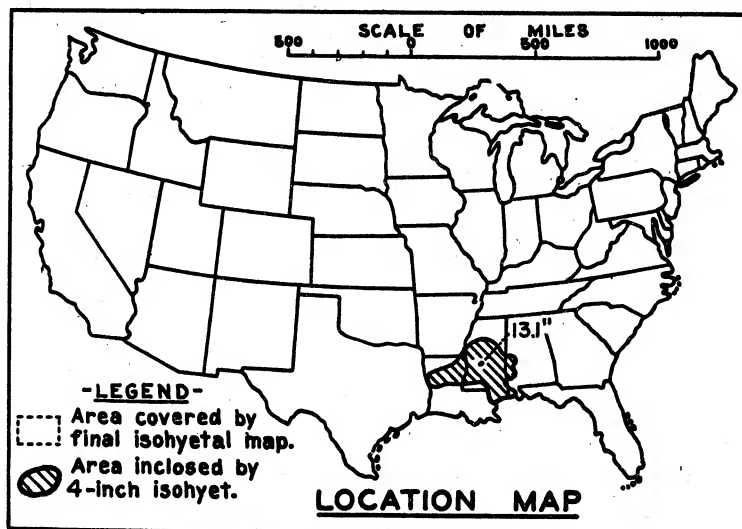
STORM STUDIES - ISOHYETAL MAP

Storm of March 25-29, 1902 Assignment LMV 2-7
Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 24-28 May 1909

Assignment LMV 2-9

Location Miss. - La.

Study Prepared by:

Lower Mississippi Valley Div.

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/11/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/5/47Remarks: Center at Shoccoa,
Mississippi.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	16
Form 5001-B (24-hour " ")-----	27
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	27

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

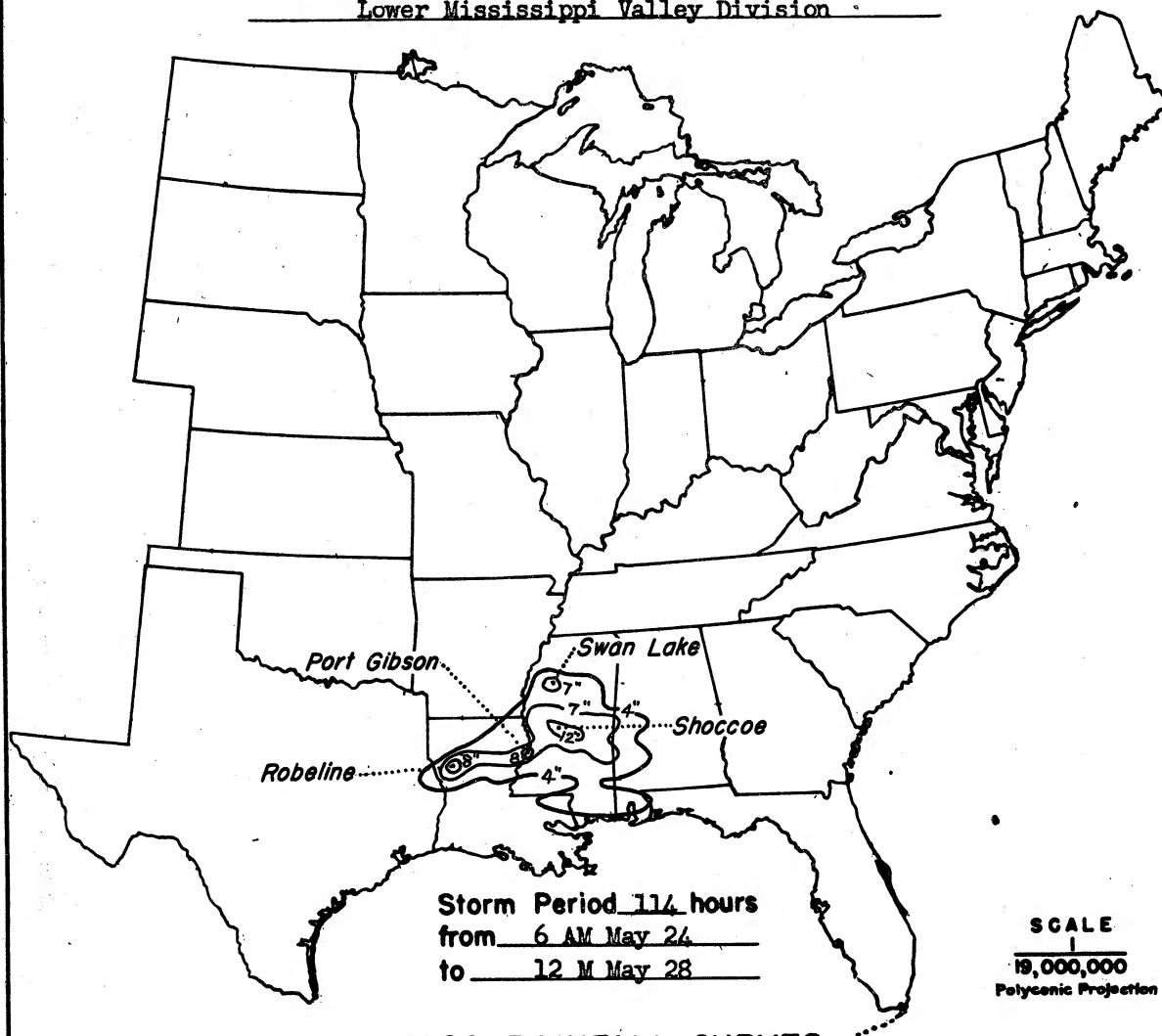
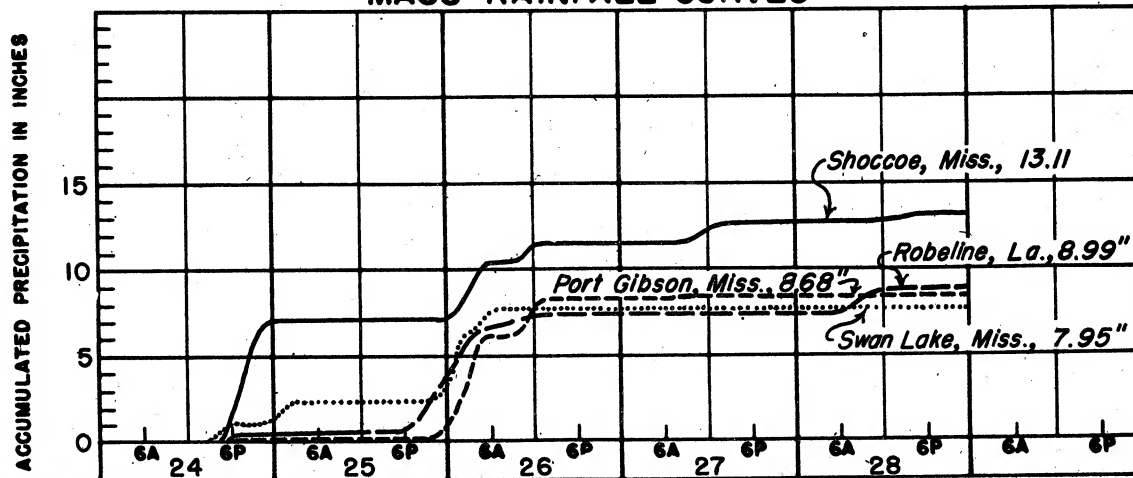
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

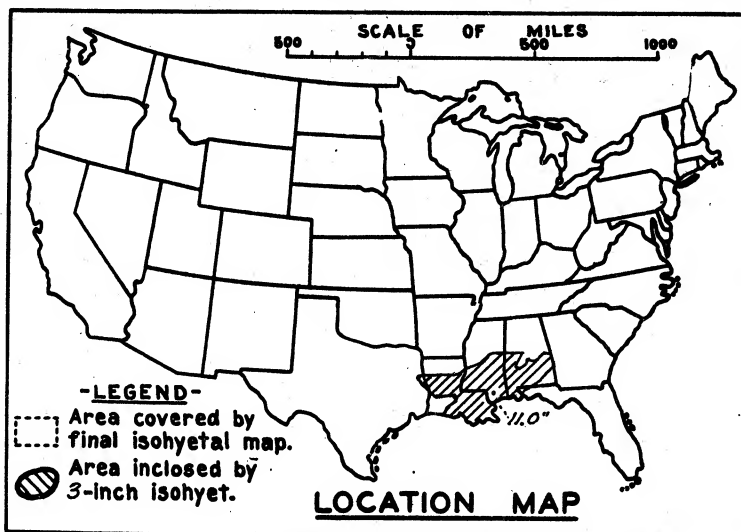
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	7.1	7.5	8.0	8.0	8.0	9.3	11.7	11.7	12.7	13.1	13.1
100	5.9	7.3	7.7	7.8	7.8	8.5	11.5	11.7	12.2	12.7	13.1
200	5.5	7.2	7.6	7.7	7.7	8.2	11.3	11.6	12.1	12.6	13.0
500	5.0	6.9	7.3	7.4	7.4	7.8	10.6	11.0	11.7	12.4	12.8
1,000	4.6	6.6	7.1	7.2	7.2	7.5	9.9	10.5	11.4	12.1	12.5
2,000	4.2	6.2	6.7	6.8	6.8	7.1	9.2	9.8	10.8	11.5	11.9
5,000	3.7	5.3	5.9	6.0	6.0	6.4	8.2	8.8	9.7	10.3	10.7
10,000	3.2	4.5	5.1	5.2	5.2	5.8	7.3	7.9	8.7	9.2	9.5
20,000	2.6	3.6	4.3	4.4	4.4	5.0	6.4	7.0	7.5	8.0	8.3
50,000	1.7	2.3	2.9	3.1	3.1	3.7	4.9	5.6	5.8	6.2	6.4
70,000	1.3	1.7	2.3	2.6	2.6	3.2	4.2	4.8	5.0	5.4	5.7

STORM STUDIES - ISOHYETAL MAP

Storm of May 24-28, 1909 Assignment LMV 2-9
Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 30 May-4 June 1909

Assignment L M V 2 - 10

Location Miss., La., Ala.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/21/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/4/46

Remarks: Center at

Pearlington, Miss.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	16
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	12
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	34

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

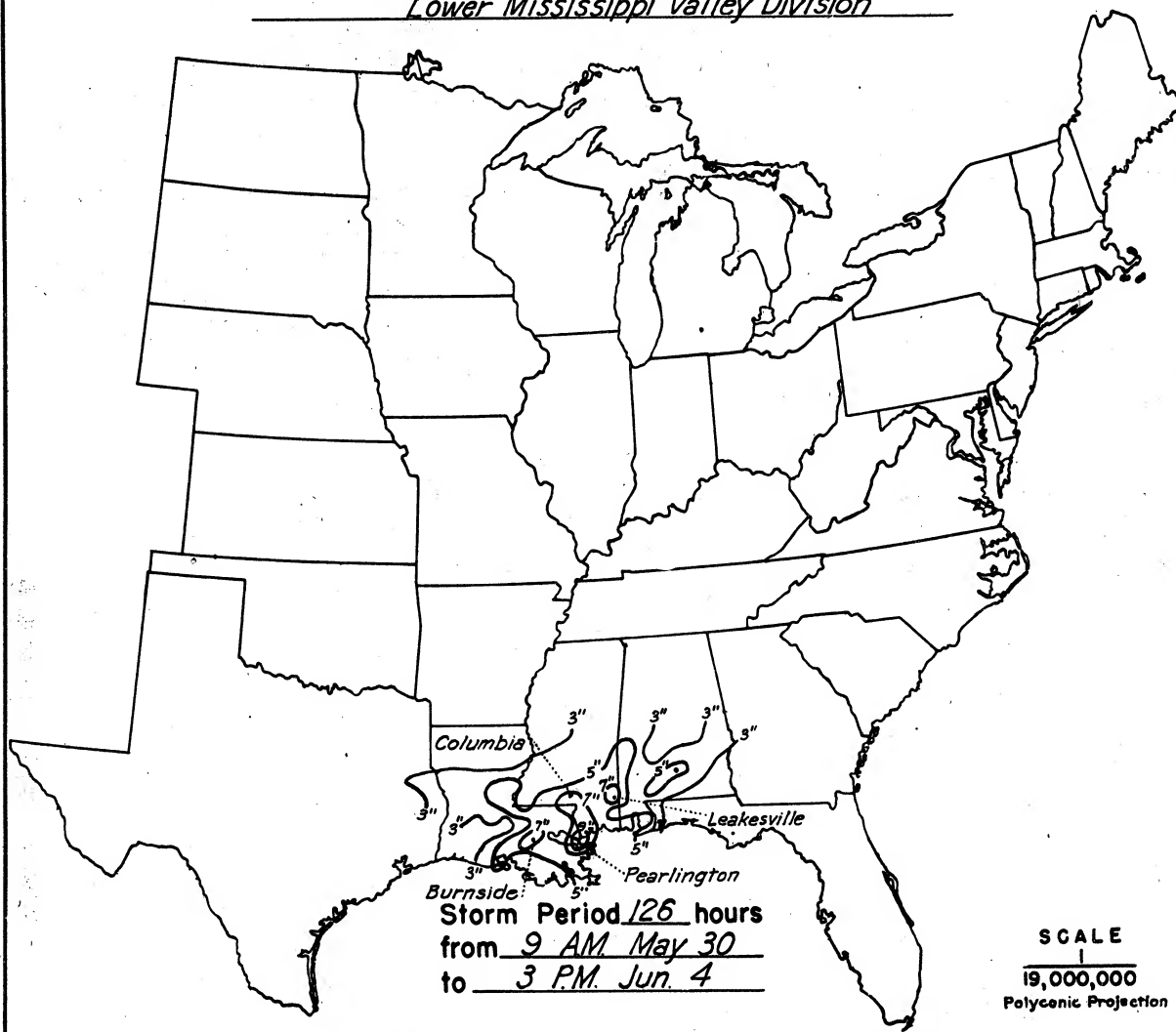
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

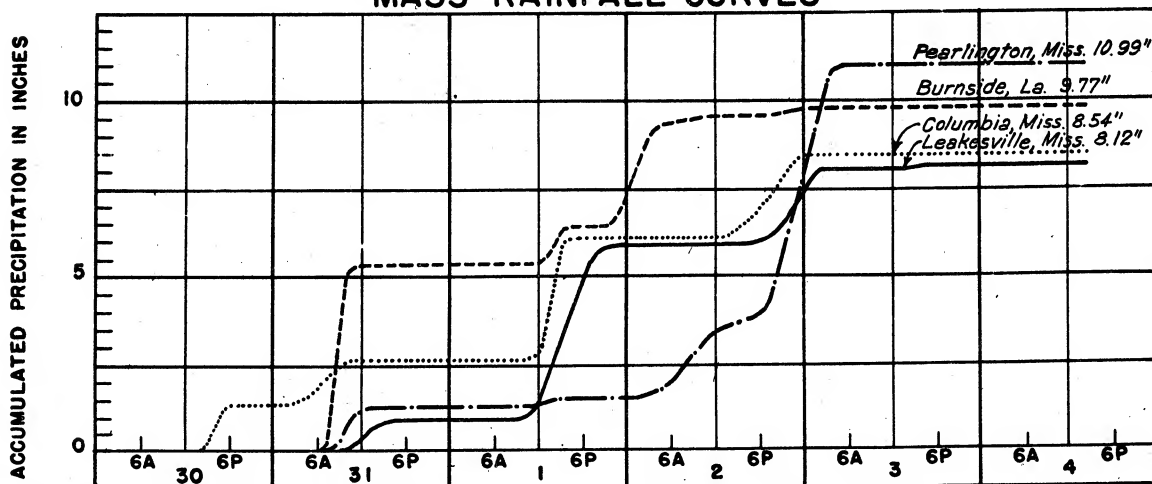
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	5.9	6.6	7.6	9.1	9.4	9.4	9.6	9.6	11.0	11.0	11.0
100	5.8	6.5	7.5	8.9	9.3	9.3	9.4	9.4	10.5	10.8	10.8
200	5.6	6.3	7.3	8.7	9.1	9.1	9.2	9.2	10.2	10.6	10.6
500	4.8	5.5	6.7	8.0	8.3	8.3	8.7	8.7	9.7	10.1	10.1
1,000	3.7	4.4	6.0	7.1	7.4	7.5	8.1	8.2	9.2	9.6	9.6
2,000	2.6	3.5	5.2	6.3	6.6	6.7	7.5	7.7	8.6	9.0	9.1
5,000	1.8	2.6	4.2	5.1	5.4	5.6	6.5	6.8	7.7	8.2	8.3
10,000	1.5	2.2	3.5	4.2	4.6	4.8	5.8	6.1	6.9	7.4	7.6
20,000	1.2	1.8	2.8	3.4	3.7	4.0	5.0	5.4	6.1	6.6	6.9
50,000	1.0	1.4	1.8	2.2	2.6	3.0	4.0	4.4	4.9	5.5	5.8
56,000	0.9	1.3	1.7	2.0	2.5	2.9	3.9	4.2	4.7	5.4	5.7

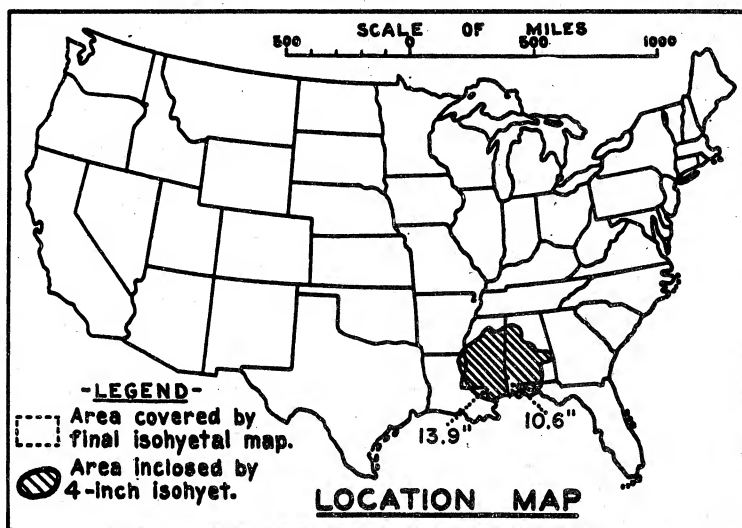
STORM STUDIES - ISOHYETAL MAP

Storm of May 30 - June 4, 1909 Assignment LMV 2-10
Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 12 - 17 April 1912

Assignment L M V 2-11

Location La., Ala., & Miss.

Study Prepared by:

Lower Mississippi Valley

Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 1/28/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/17/47

Remarks:

Center at
Pearl River, La., and
Daphne, Ala.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 18

Form 5001-B (24-hour " ")----- 16

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 48

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 5

Form S-11 (Depth-area data from isohyetal map)----- 2

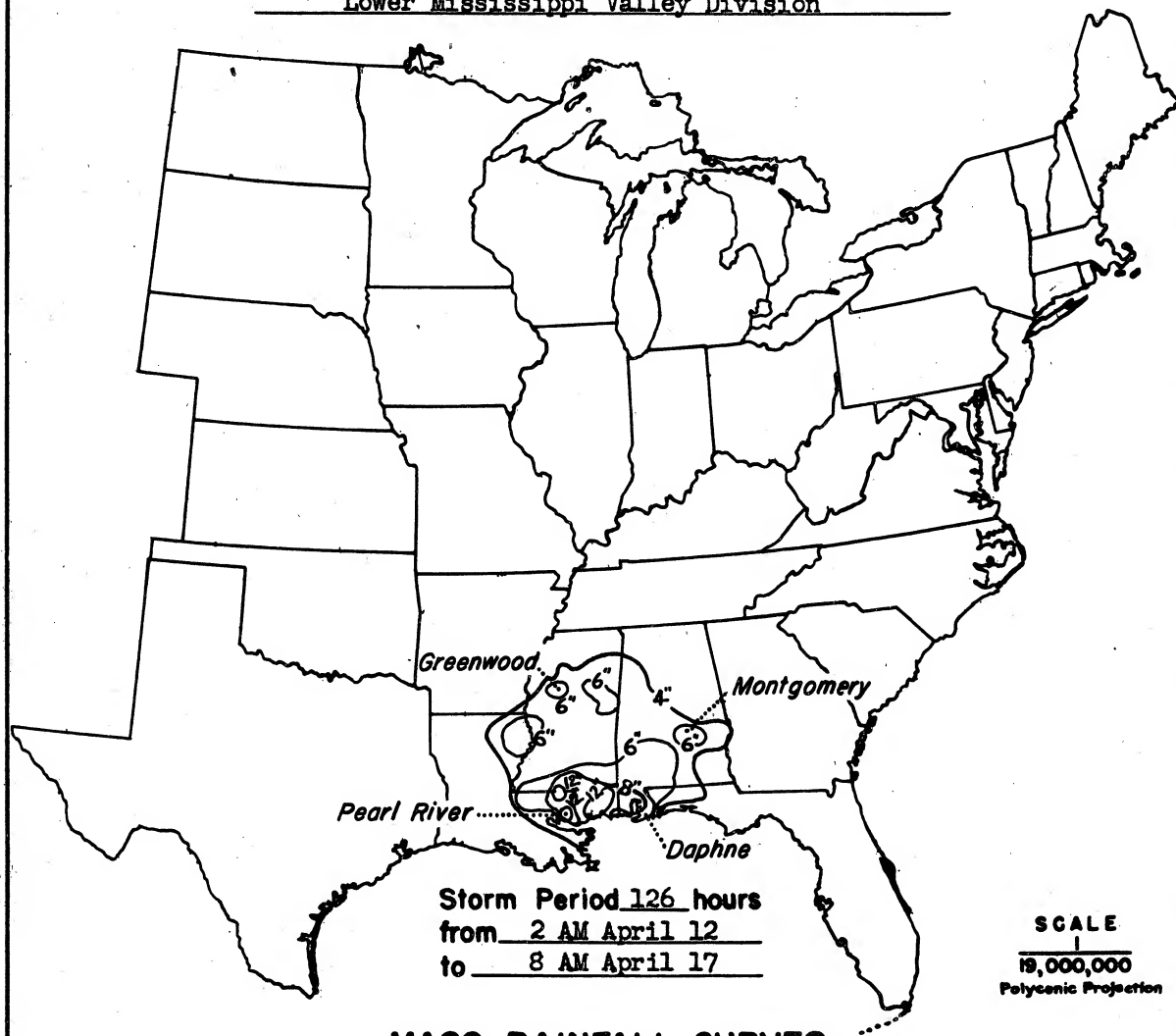
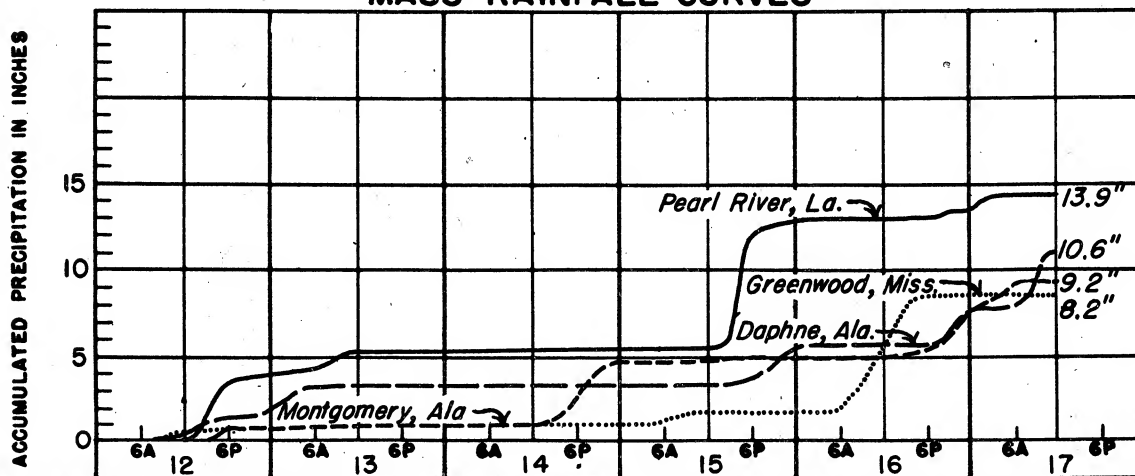
Form S-12 (Maximum depth-duration data)----- 6

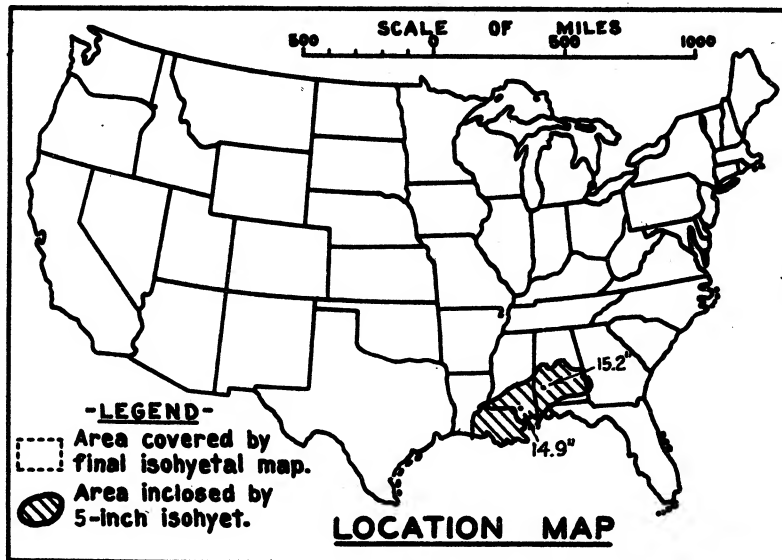
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	7.4	7.5	7.5	7.5	7.8	8.7	8.8	8.8	8.0	12.6	13.9
100	7.2	7.2	7.2	7.2	7.6	8.5	8.5	8.5	8.5	12.2	13.5
200	6.5	6.6	6.7	6.7	7.1	8.0	8.2	8.2	8.2	11.5	13.4
500	5.2	5.7	6.0	6.2	6.5	7.4	7.7	7.7	7.7	10.6	13.1
1,000	4.3	4.9	5.3	5.7	6.0	6.9	7.3	7.4	7.4	9.9	12.9
2,000	3.6	4.2	4.7	5.3	5.5	6.4	7.0	7.0	7.0	9.2	12.4
5,000	2.8	3.4	3.9	4.7	4.9	5.7	6.5	6.6	6.6	8.3	11.5
10,000	2.3	2.8	3.3	4.2	4.4	5.2	6.1	6.2	6.2	7.5	10.8
20,000	1.9	2.4	2.9	3.7	3.8	4.6	5.4	5.5	5.7	6.5	9.4
50,000	1.4	1.9	2.4	2.8	3.0	3.6	4.5	4.6	4.9	5.2	7.4
100,000	1.1	1.6	2.0	2.2	2.4	2.9	3.6	3.8	4.0	4.2	5.8

STORM STUDIES - ISOHYETAL MAPStorm of April 12-17, 1912 Assignment LMV 2-11Study Prepared by: Vicksburg, Miss. DistrictLower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of June 1 - 5, 1928
 Assignment LMV 2 - 18
 Location Ala., Miss., & La.
 Study Prepared by:
 Lower Mississippi Valley
 Division
 Vicksburg District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/20/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 8/28/43
 Remarks: Centers at:
 Thomasville, Ala. and
 Poplarville, Miss.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	25
Form 5001-B (24-hour " ")-----	46
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	46

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

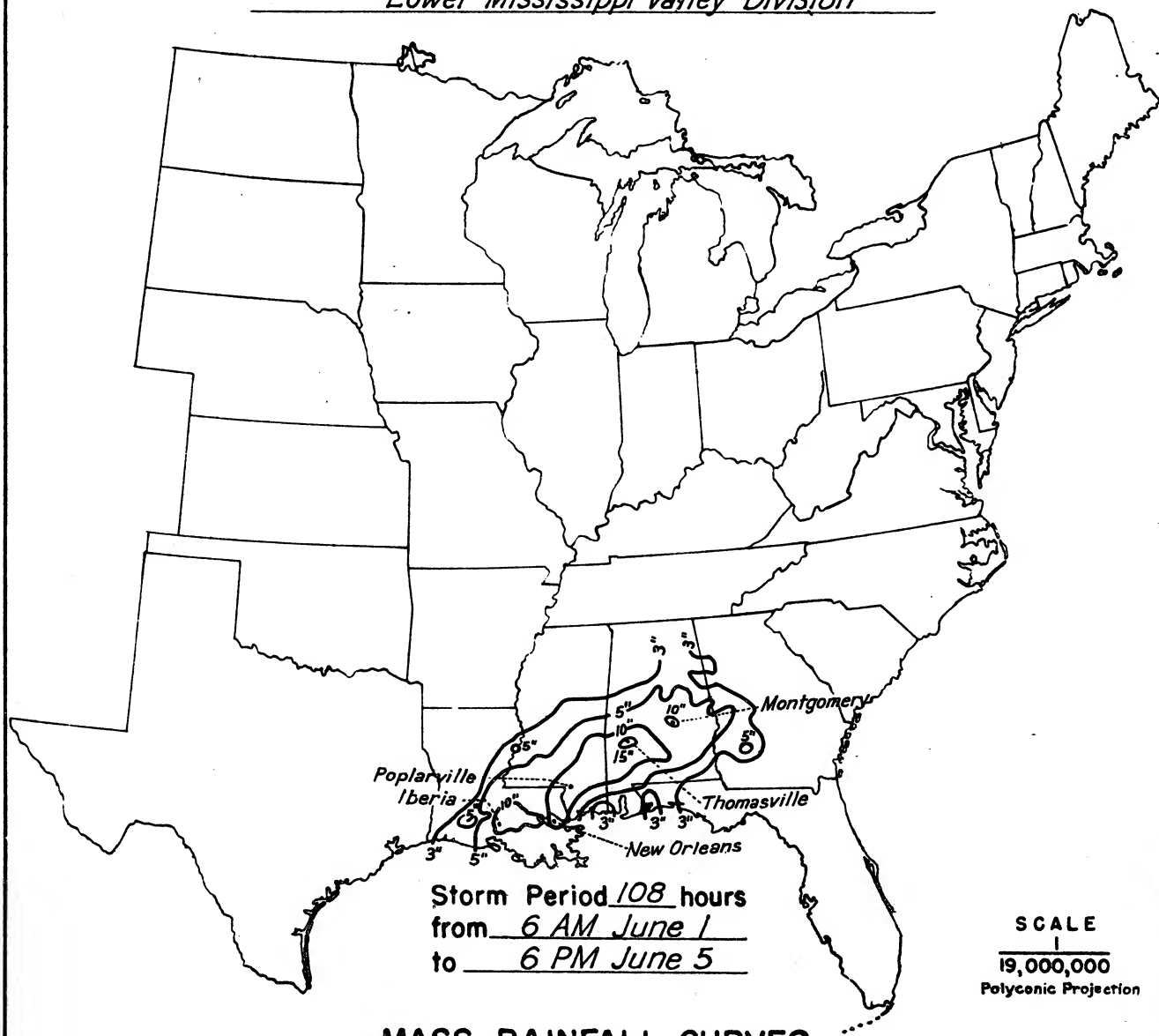
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

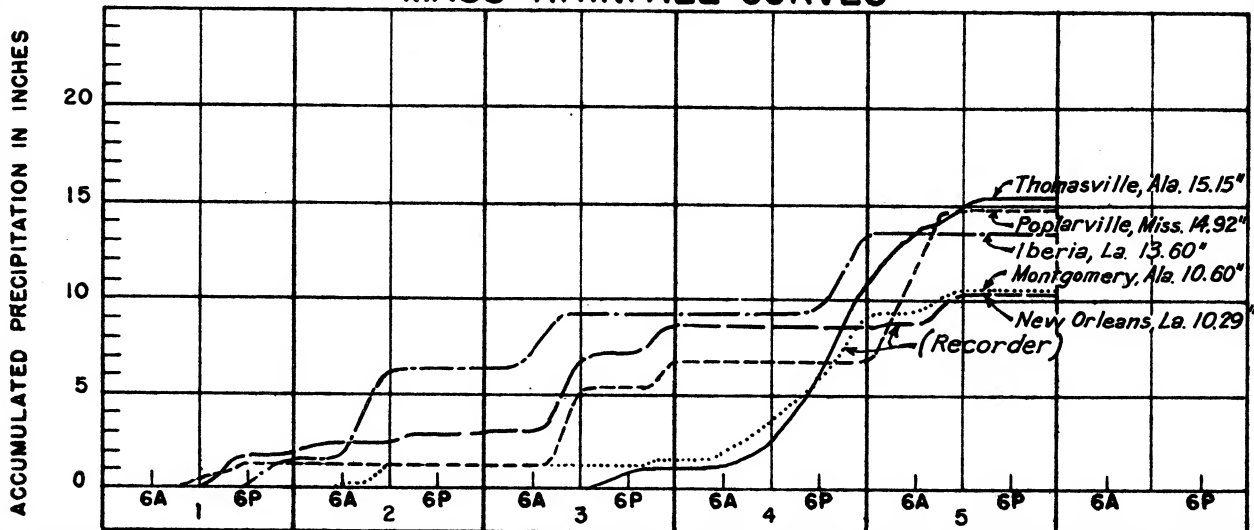
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

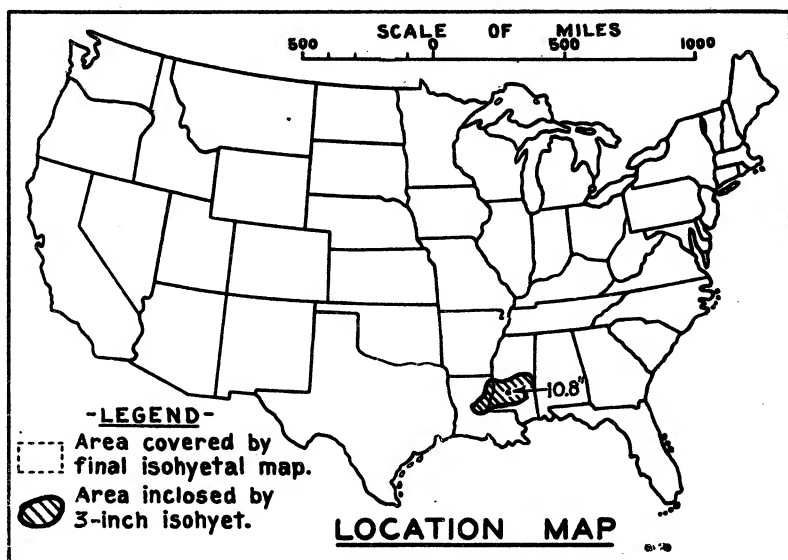
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	90	108
10	7.5	10.2	11.3	12.4	14.2	14.2	15.2	15.2	15.2	15.2	15.2
100	6.2	9.0	10.7	12.2	13.8	13.9	14.9	14.9	15.0	15.1	15.1
200	5.7	8.6	10.5	12.0	13.6	13.7	14.8	14.8	14.9	15.0	15.0
500	5.2	8.1	10.2	11.7	13.2	13.4	14.5	14.6	14.7	14.8	14.8
1,000	4.7	7.6	9.8	11.4	12.8	13.0	14.2	14.3	14.4	14.6	14.7
2,000	4.2	7.2	9.4	10.9	12.2	12.6	13.8	14.0	14.1	14.3	14.4
5,000	3.6	6.4	8.6	9.9	10.9	11.5	12.7	13.2	13.3	13.7	14.0
10,000	3.1	5.7	7.5	8.6	9.5	10.1	11.3	12.0	12.3	12.8	13.3
20,000	2.6	4.8	6.2	7.1	7.9	8.4	9.5	10.3	10.6	11.3	12.0
50,000	1.8	3.3	4.3	4.9	5.4	5.9	6.9	7.6	7.9	8.6	9.3
100,000	1.1	2.1	2.7	3.1	3.5	3.8	4.7	5.4	5.6	6.0	6.6

STORM STUDIES - ISOHYETAL MAP

Storm of June 1-5, 1928 Assignment LMV 2-18Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 12 - 17, 1928

Assignment L M V 2 - 19

Location Miss. and La.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/13/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/23/45

Remarks: Center at :

Crystal Springs, Miss.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 19
 Form 5001-B (24-hour " ")----- 9
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 10

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

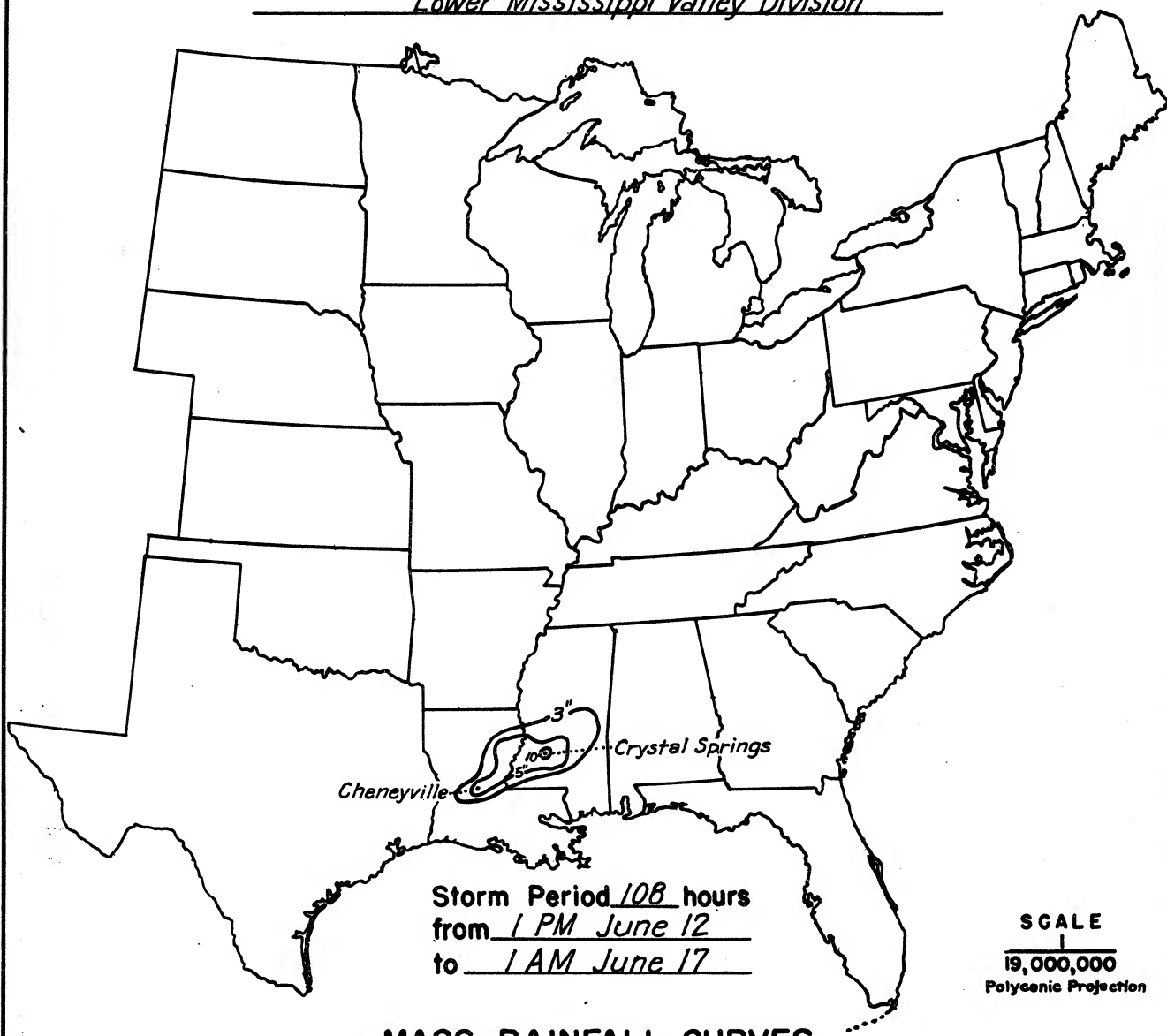
Form S-10 (Data from mass rainfall curves)----- 2
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 4
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

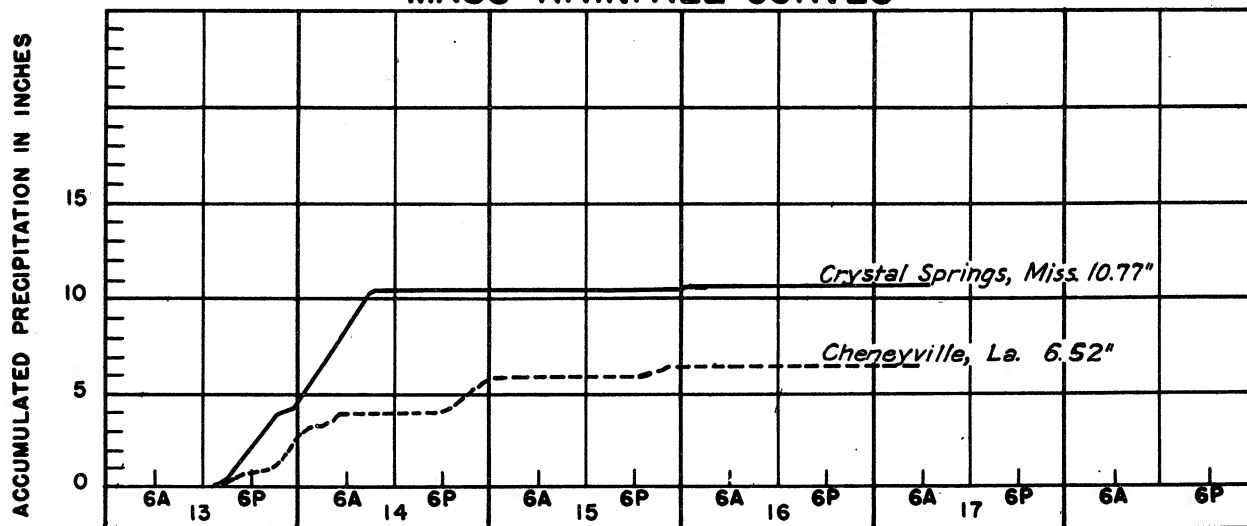
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	4.2	6.6	9.8	10.4	10.4	10.4	10.4	10.8	10.8	10.8	10.8
100	4.1	6.4	8.9	10.1	10.1	10.1	10.1	10.6	10.6	10.6	10.6
200	4.0	6.3	8.5	9.9	9.9	9.9	9.9	10.3	10.3	10.3	10.3
500	3.7	5.9	7.8	9.3	9.3	9.3	9.3	9.6	9.6	9.6	9.6
1,000	3.4	5.5	7.2	8.6	8.6	8.6	8.6	9.0	9.0	9.0	9.0
2,000	3.1	4.9	6.5	7.7	7.7	7.8	7.8	8.2	8.3	8.3	8.3
5,000	2.6	4.1	5.4	6.4	6.4	6.5	6.6	7.0	7.1	7.1	7.1
10,000	2.1	3.4	4.5	5.3	5.3	5.4	5.5	5.9	6.0	6.1	6.1
20,000	1.7	2.7	3.5	4.2	4.2	4.3	4.4	4.7	4.8	4.9	4.9

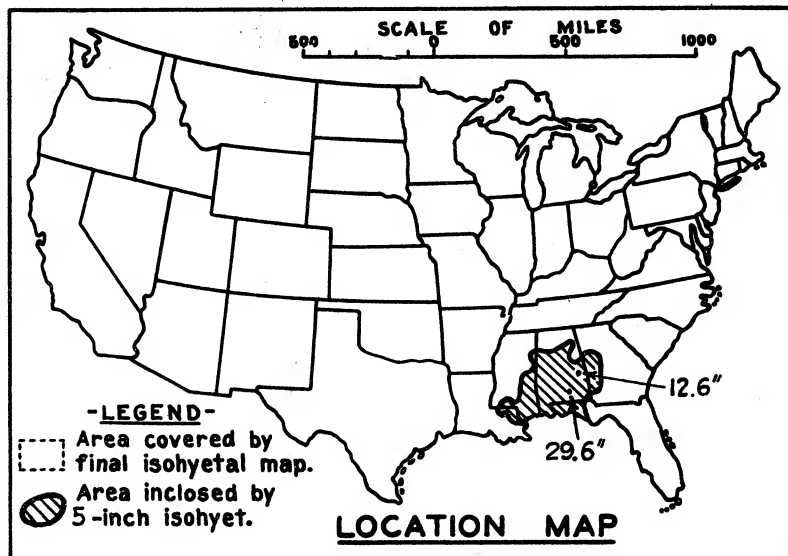
STORM STUDIES - ISOHYETAL MAP

Storm of June 12-17, 1928 Assignment LMV 2-19
Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of March 11 - 16, 1929

Assignment L M V 2 - 20

Location Miss. Ala. and Ga.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of

Weather Bureau, 1/9/39

Part II Approved by Office, Chief

of Engineers for Distribution

of Factual Data, 3/24/43

Remarks: Centers at :

Elba, Ala. and Spring Hill,
Ala.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in - sheet, scale -

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 15

Form 5001-B (24-hour " " " ") (Old W. B. Forms 5001-A)----- 244

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- 212

Form 5002 (Mass rainfall curves)----- 56

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 7

Form S-11 (Depth-area data from isohyetal map)----- 4

Form S-12 (Maximum depth-duration data)----- 15

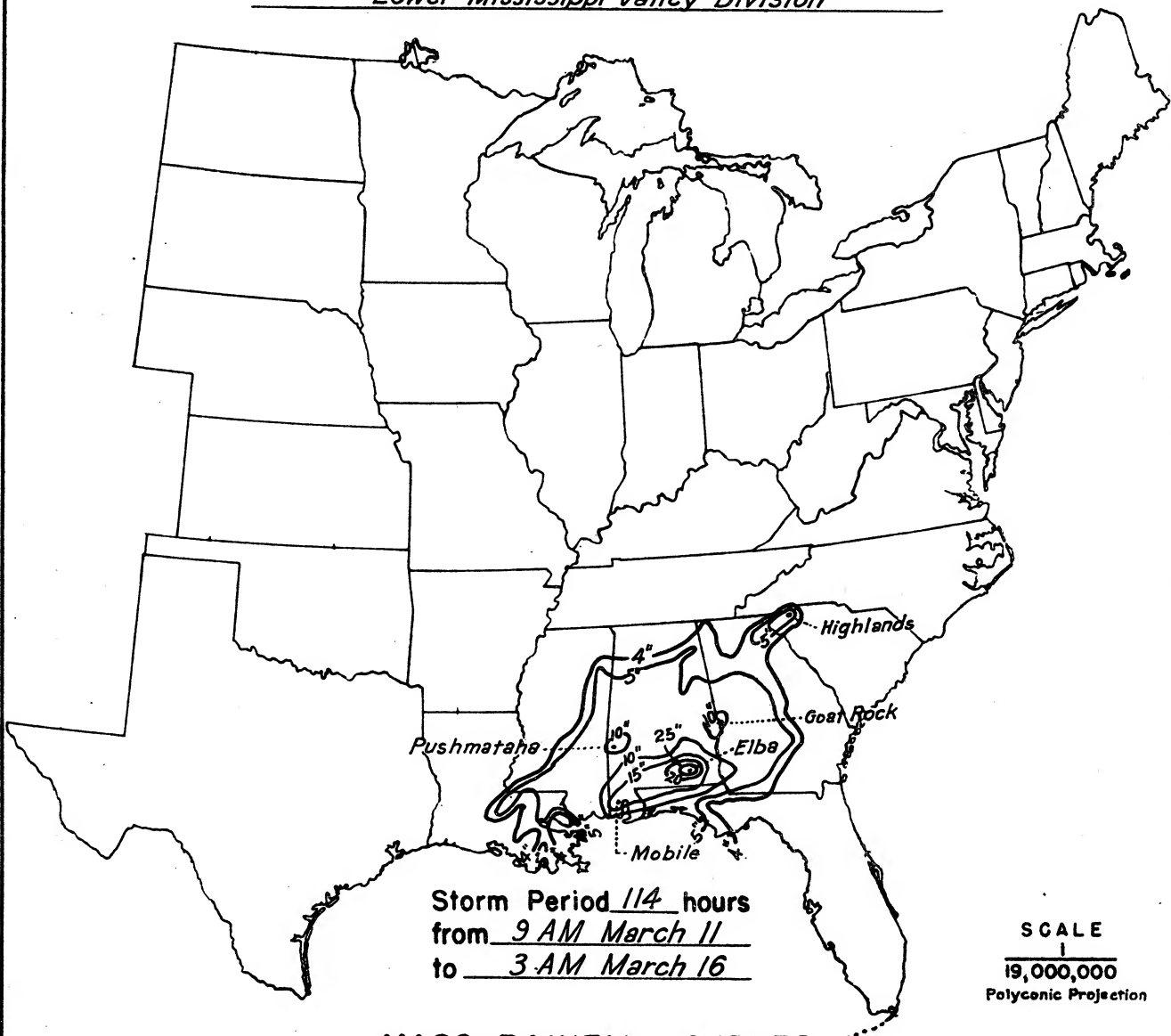
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 2

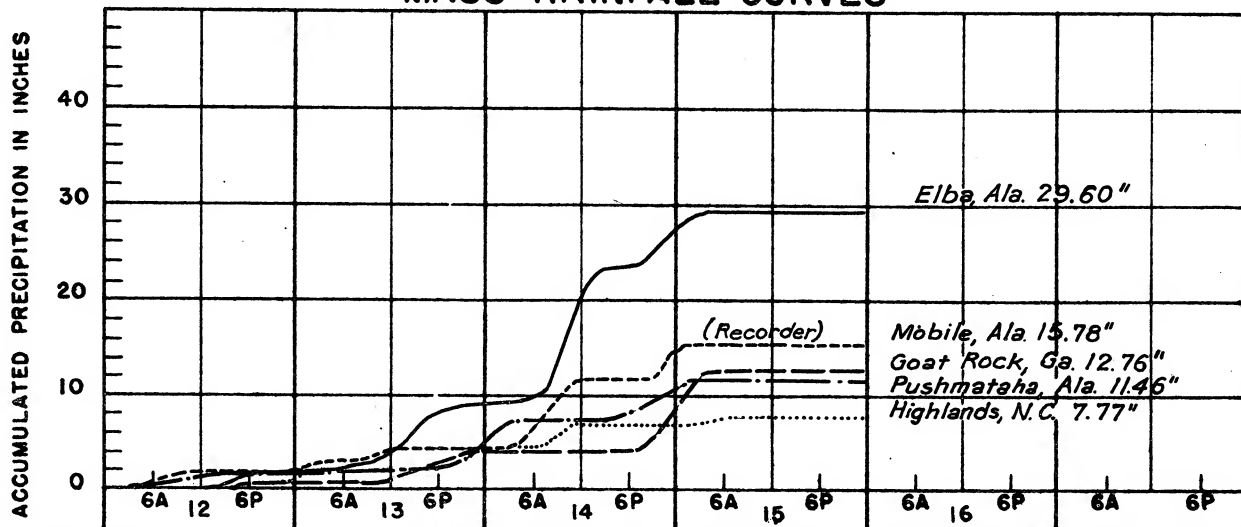
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

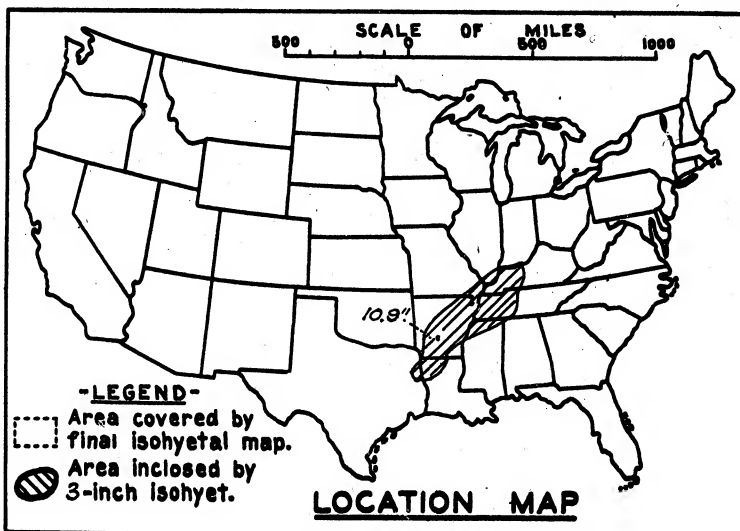
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	144
10	14.0	15.4	19.5	20.0	21.4	23.8	27.4	28.0	29.6	29.6	29.6
100	13.6	14.9	18.9	19.3	20.7	22.9	26.1	26.6	28.4	28.4	28.4
200	13.1	14.4	18.3	18.6	20.0	22.2	25.5	26.0	27.6	27.6	27.6
500	11.6	13.2	16.7	17.2	18.3	20.2	24.0	24.7	26.1	26.1	26.1
1,000	10.2	11.8	15.4	16.1	17.0	18.6	22.1	22.9	24.4	24.6	24.6
2,000	8.9	10.4	14.1	15.0	15.7	17.0	20.0	20.8	22.3	22.5	22.5
5,000	7.1	8.6	12.2	13.5	13.9	14.8	17.3	18.1	19.4	19.7	19.7
10,000	5.6	7.2	10.1	12.1	12.5	13.1	15.2	15.9	17.1	17.5	17.5
20,000	3.8	5.4	7.9	9.6	10.1	11.0	12.5	13.3	14.3	14.7	14.7
50,000	2.5	3.6	5.3	6.3	7.1	7.9	8.9	9.7	10.5	10.8	10.8
100,000	1.6	2.4	3.5	4.3	5.0	5.6	6.5	7.2	7.8	8.2	8.2

STORM STUDIES - ISOHYETAL MAP

Storm of March 11-16, 1929 Assignment LMV 2-20Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 6-11 January 1930

Assignment L M V 2 - 22

Location Ark., Miss., & Tenn.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8/23/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/31/45

Remarks: Center at:

Arkadelphia, Ark.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	5
Form 5001-B (24-hour " ")	-----	33
Form 5001-D (" " " ")	-----	-
Misc. precip. records, meteorological data, etc.	-----	-
Form 5002 (Mass rainfall curves)	-----	33

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

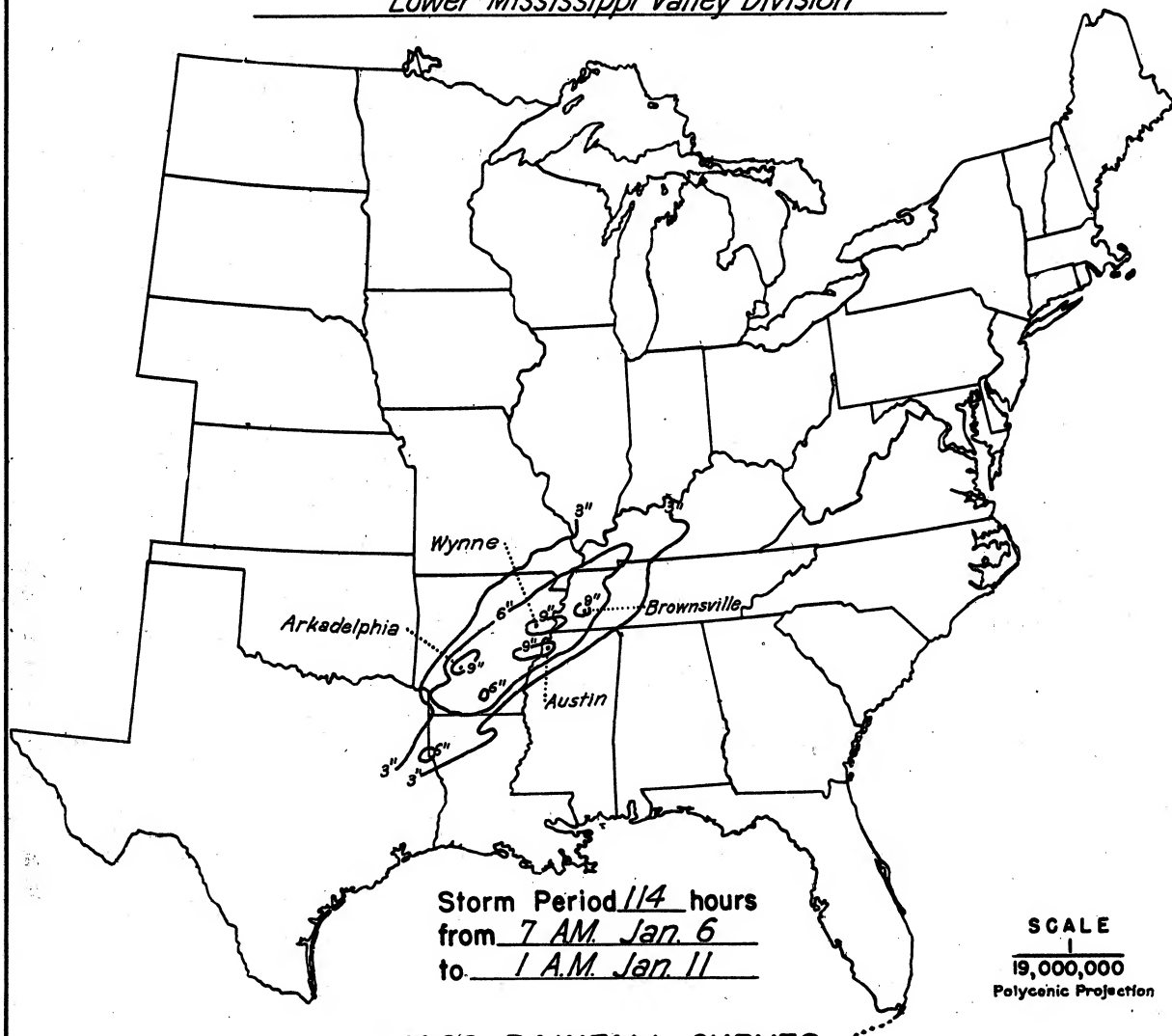
Form S-10 (Data from mass rainfall curves)	-----	5
Form S-11 (Depth-area data from isohyetal map)	-----	2
Form S-12 (Maximum depth-duration data)	-----	8
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

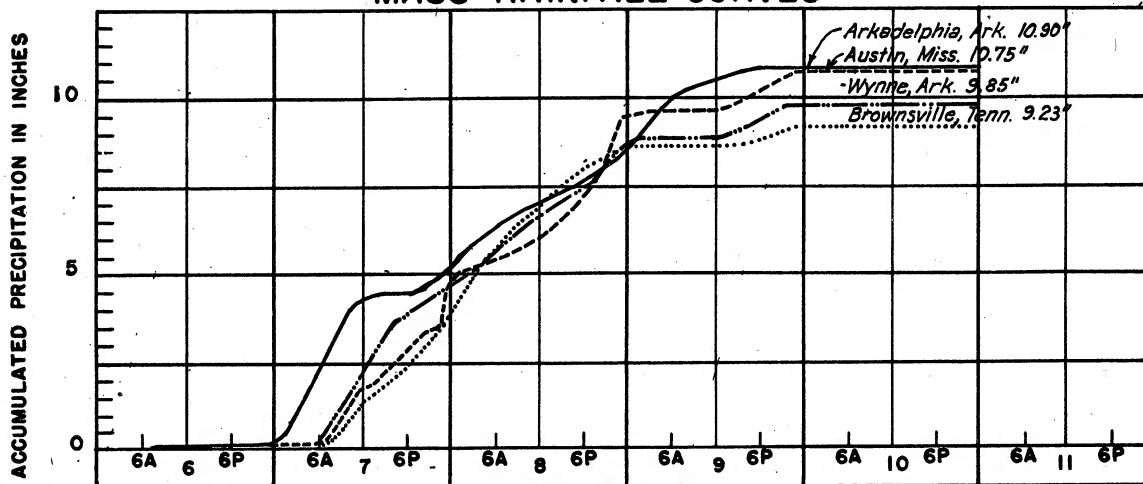
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	3.5	4.3	5.4	6.2	7.1	8.8	9.6	10.6	10.8	10.9	10.9
100	3.2	4.2	5.1	5.9	7.0	8.3	9.4	10.3	10.6	10.7	10.7
200	3.0	4.1	5.0	5.8	6.9	8.1	9.3	10.1	10.4	10.5	10.5
500	2.8	4.0	4.9	5.6	6.7	7.8	9.1	9.9	10.2	10.3	10.3
1,000	2.7	3.9	4.7	5.4	6.5	7.5	8.8	9.6	10.0	10.1	10.1
2,000	2.5	3.7	4.5	5.2	6.3	7.2	8.6	9.4	9.7	9.8	9.8
5,000	2.2	3.4	4.2	4.9	5.8	6.8	8.1	8.9	9.3	9.4	9.4
10,000	2.0	3.2	3.9	4.6	5.5	6.3	7.7	8.5	8.9	8.9	8.9
20,000	1.7	2.8	3.6	4.2	5.0	5.8	7.2	7.9	8.4	8.4	8.4
50,000	1.2	2.1	2.7	3.4	4.2	4.8	6.0	6.4	7.0	7.1	7.1
70,000	0.9	1.7	2.2	3.1	3.8	4.2	5.2	5.6	6.2	6.3	6.3

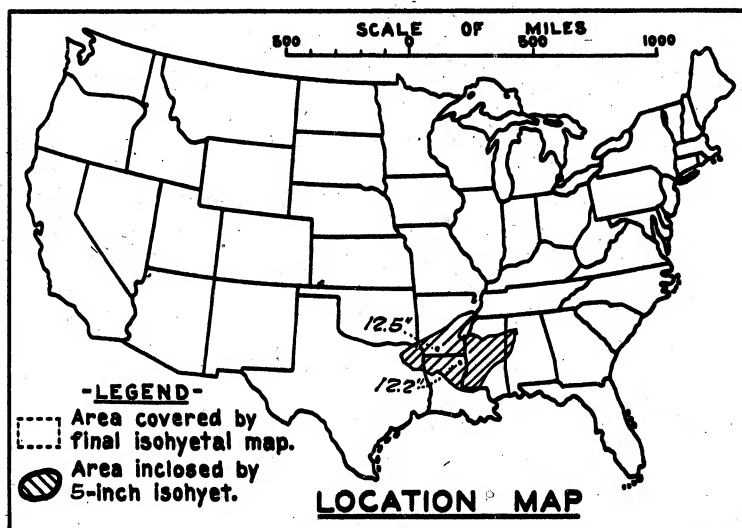
STORM STUDIES - ISOHYETAL MAP

Storm of January 6-11, 1930 Assignment LMV 2-22
Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 15-19 May 1930
 Assignment L M V 2 - 24

Location Ark., La., Miss.

Study Prepared by:

Lower Mississippi Valley
 Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12/12/41

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/7/46

Remarks: Centers at

Camden, Ark., and Lake
 Providence, La.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	8
Form 5001-B (24-hour " ").....	40
Form 5001-D (" " " ").....	1
Misc. precip. records, meteorological data, etc.....	—
Form 5002 (Mass rainfall curves).....	42

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	5
Form S-11 (Depth-area data from isohyetal map).....	3
Form S-12 (Maximum depth-duration data).....	15
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

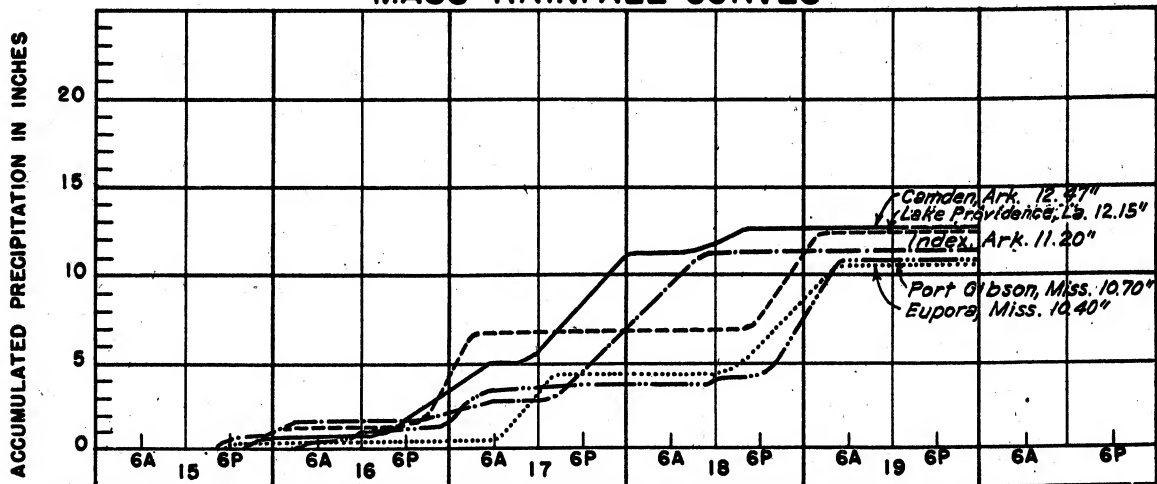
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	6.1	6.8	7.7	8.4	9.7	10.4	11.4	11.8	12.5	12.5	12.5
100	5.8	6.4	7.0	8.0	9.4	10.2	11.2	11.7	12.4	12.4	12.4
200	5.6	6.2	6.8	7.8	9.2	10.0	11.0	11.6	12.3	12.3	12.3
500	5.3	6.0	6.5	7.6	8.8	9.6	10.7	11.4	12.0	12.1	12.1
1,000	5.0	5.8	6.3	7.3	8.2	9.0	10.4	11.2	11.7	11.8	11.8
2,000	4.4	5.5	6.0	6.9	7.5	8.2	9.8	10.7	11.3	11.4	11.4
5,000	2.9	4.9	5.5	6.1	6.5	7.1	8.5	9.6	10.4	10.6	10.6
10,000	2.2	4.2	4.8	5.2	5.6	6.2	7.1	8.6	9.5	9.8	9.8
20,000	1.7	3.1	3.6	4.1	4.5	5.3	6.7	7.5	8.4	9.0	9.0
50,000	1.1	1.9	2.5	2.9	3.4	4.0	5.3	6.1	6.7	7.7	7.7
100,000	0.8	1.2	1.7	2.2	2.7	3.3	4.2	4.8	5.2	6.3	6.3
116,000	0.7	1.1	1.6	2.1	2.6	3.1	4.0	4.6	4.9	5.9	5.9

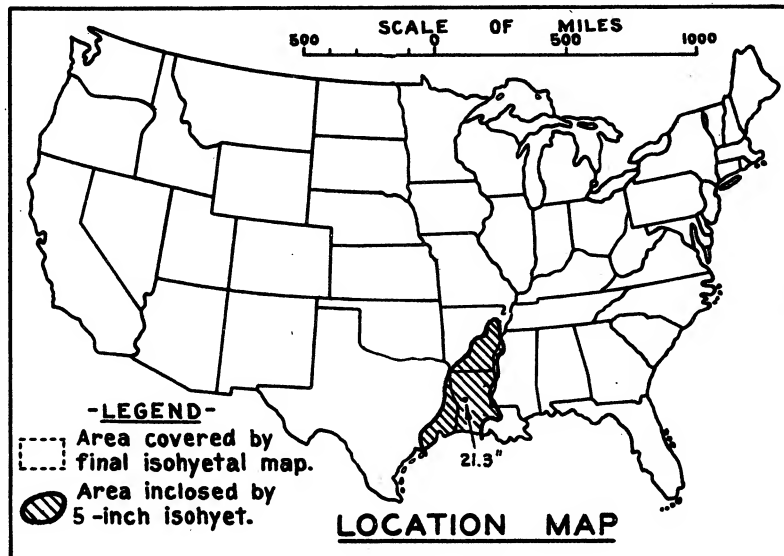
STORM STUDIES - ISOHYETAL MAP

Storm of May 15-19, 1930 Assignment LMV 2-24
 Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 22 - 27, 1933
 Assignment LM V 2 - 26
 Location Ark., La., and Texas
 Study Prepared by:

Office, Chief of Engineers

Part I Reviewed by H. M. Sec. of
 Weather Bureau, -

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/30/40

Remarks: Part II used as
 Supplement C, Engineer
 Bulletin R. & H. No. 10
 1938, E.D. 7390

Center at Logansport, La.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	322 (5001 WB)
Form 5002 (Mass rainfall curves)-----	37

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

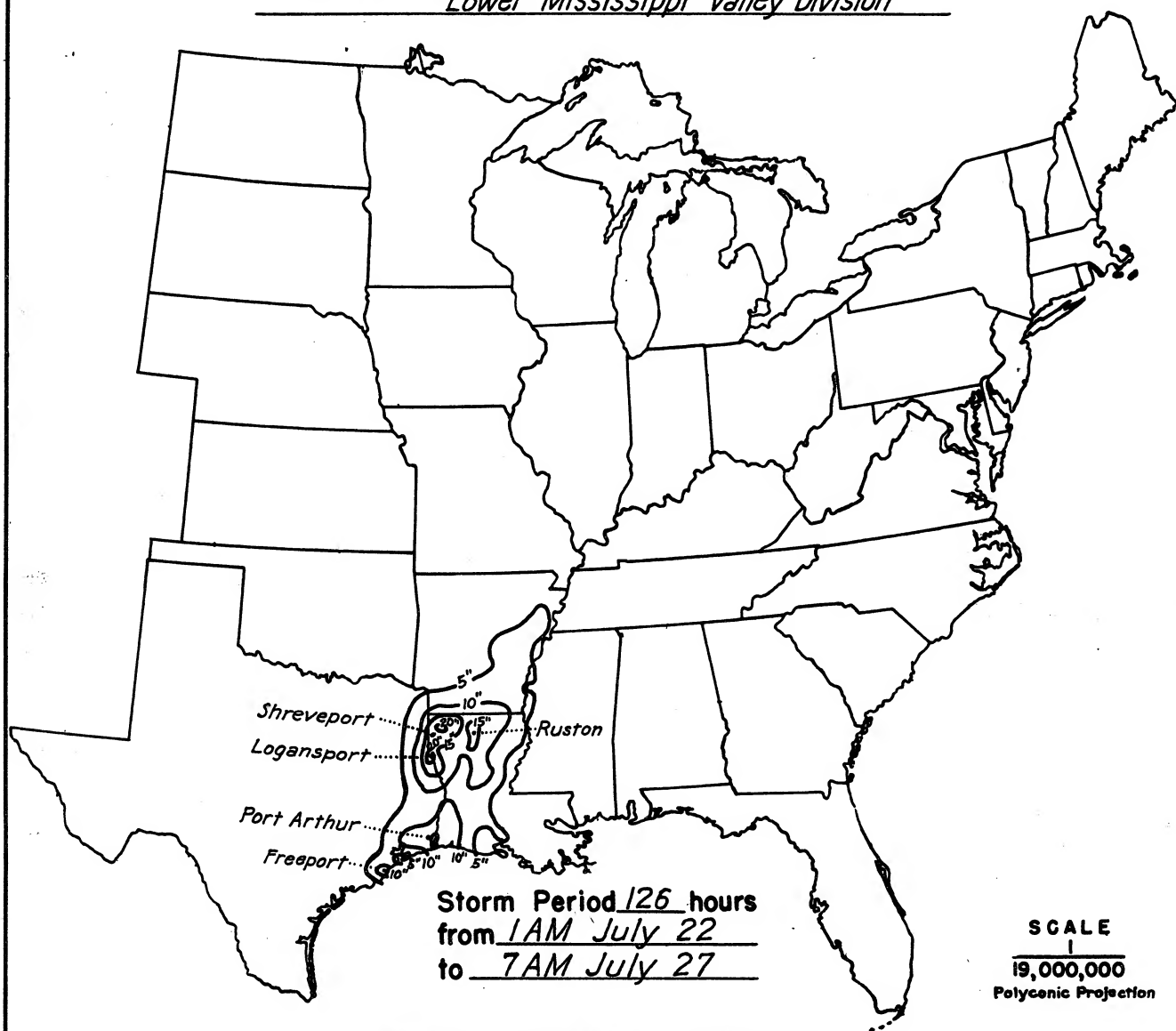
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

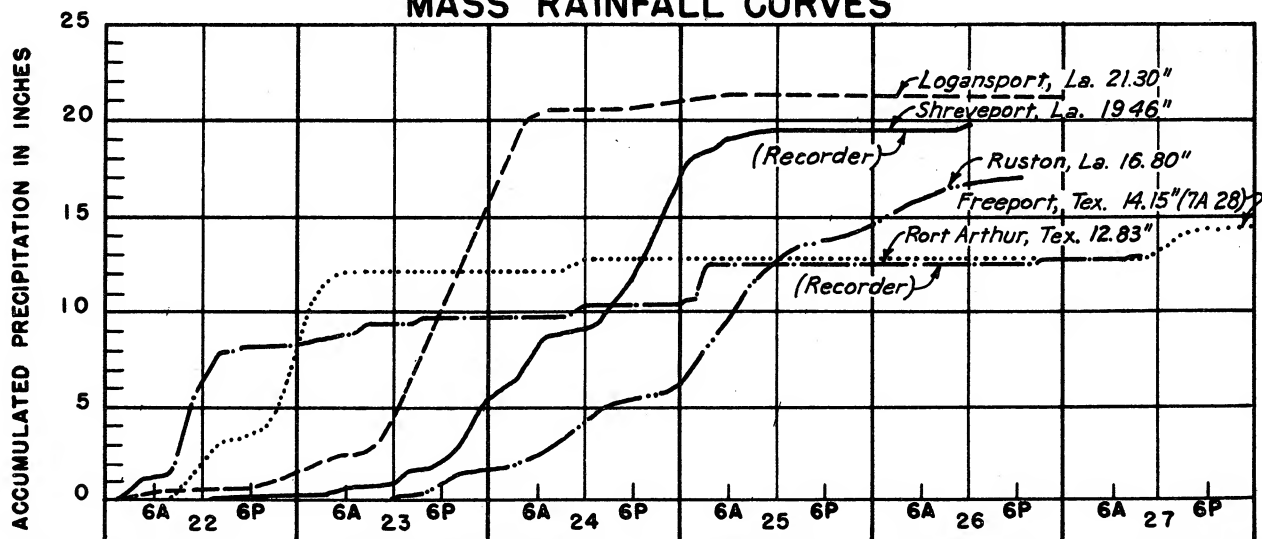
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

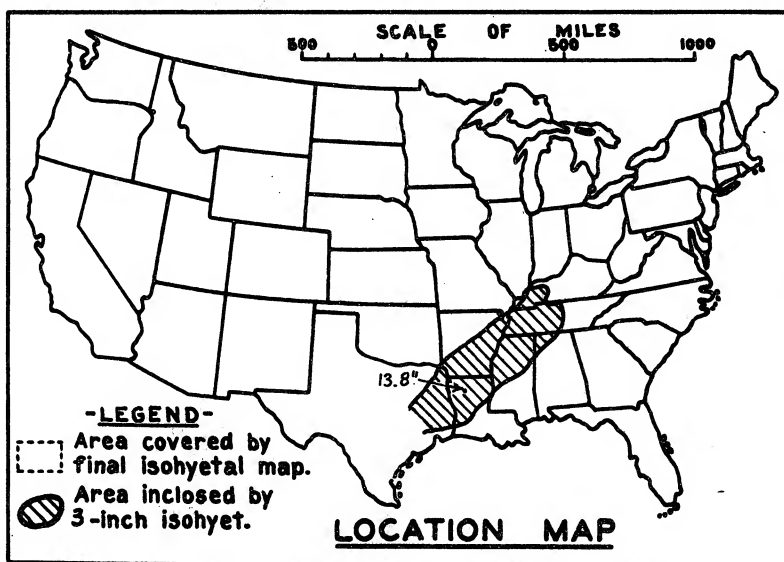
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	5.9	11.8	16.8	18.0	18.7	19.9	20.3	20.8	21.3	21.3	21.3
100	5.7	11.4	15.1	17.4	18.1	19.2	19.6	20.2	20.6	20.7	20.7
200	5.6	11.2	14.4	17.1	17.7	18.8	19.2	19.8	20.2	20.3	20.3
500	5.4	10.6	13.4	16.2	16.9	17.9	18.4	19.4	19.7	19.9	19.9
1,000	5.0	9.7	12.4	14.8	15.6	16.8	17.8	18.8	19.2	19.3	19.4
2,000	4.6	8.5	11.0	13.0	14.0	15.5	16.9	18.0	18.4	18.6	18.7
5,000	3.8	6.8	8.9	10.5	11.5	13.2	15.1	16.4	16.8	17.1	17.3
10,000	3.1	5.5	7.2	8.5	9.5	11.1	13.3	14.3	14.9	15.4	15.7
20,000	2.3	4.1	5.4	6.5	7.4	8.6	10.9	11.8	12.4	13.3	13.7
50,000	1.2	2.2	3.0	3.7	4.5	5.3	6.8	7.7	8.7	9.9	10.4
100,000	0.4	0.8	1.2	1.6	2.3	2.6	3.4	4.4	5.6	6.9	7.4

STORM STUDIES - ISOHYETAL MAP

Storm of July 22-27, 1933 Assignment LMV 2-26Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of December 23-27, 1904

Assignment L M V 3 - 10

Location Ark., La., Miss.

Study Prepared by:

Lower Mississippi Valley
Division

Vicksburg District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10-15-43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10-3-45

Remarks:

Center at
Liberty Hill, La.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	14
Form 5001-B (24-hour " " " ").....	37
Form 5001-D (" " " " " ").....	-
Miscl. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	39

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

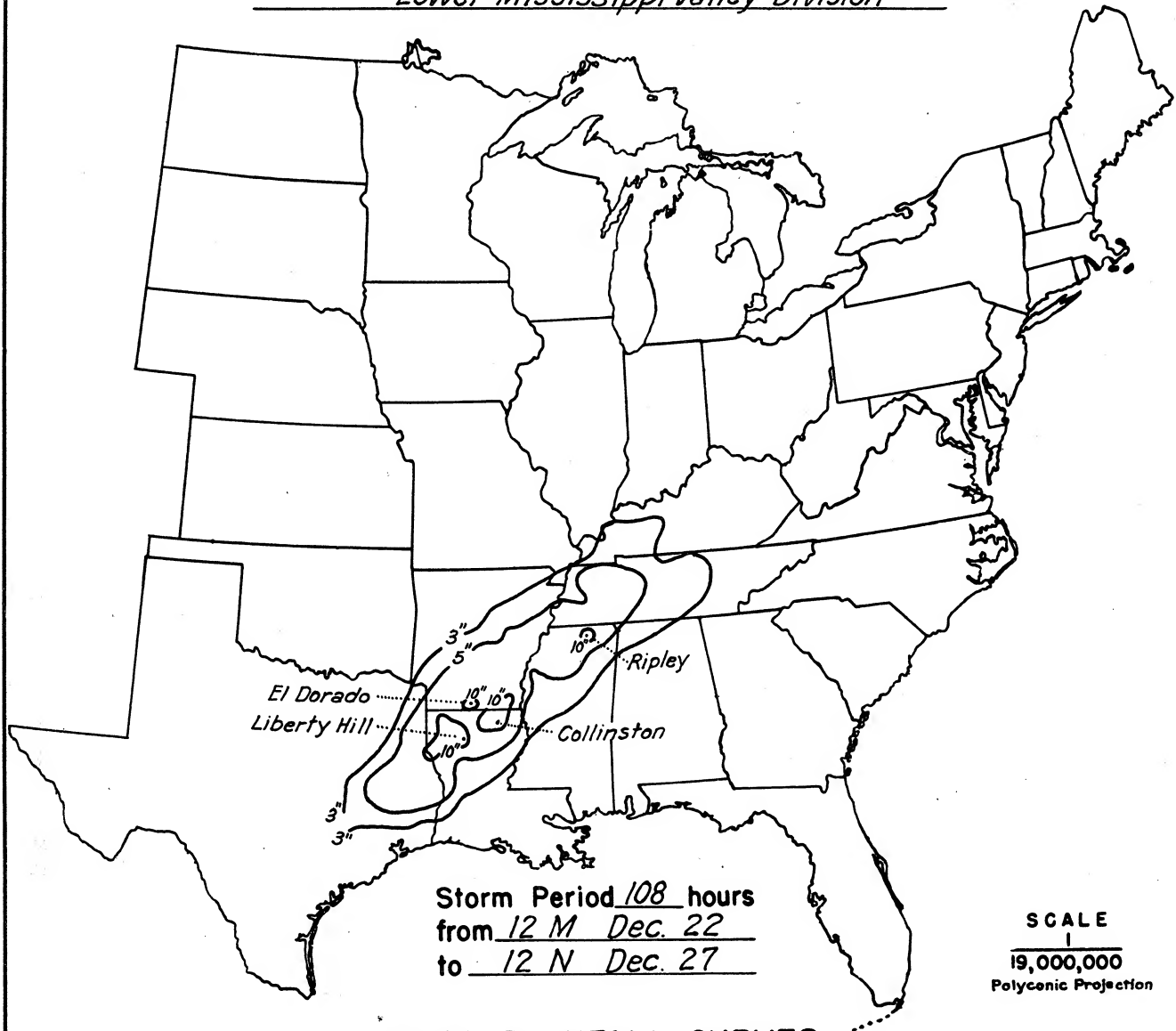
Form S-10 (Data from mass rainfall curves).....	5
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	10
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

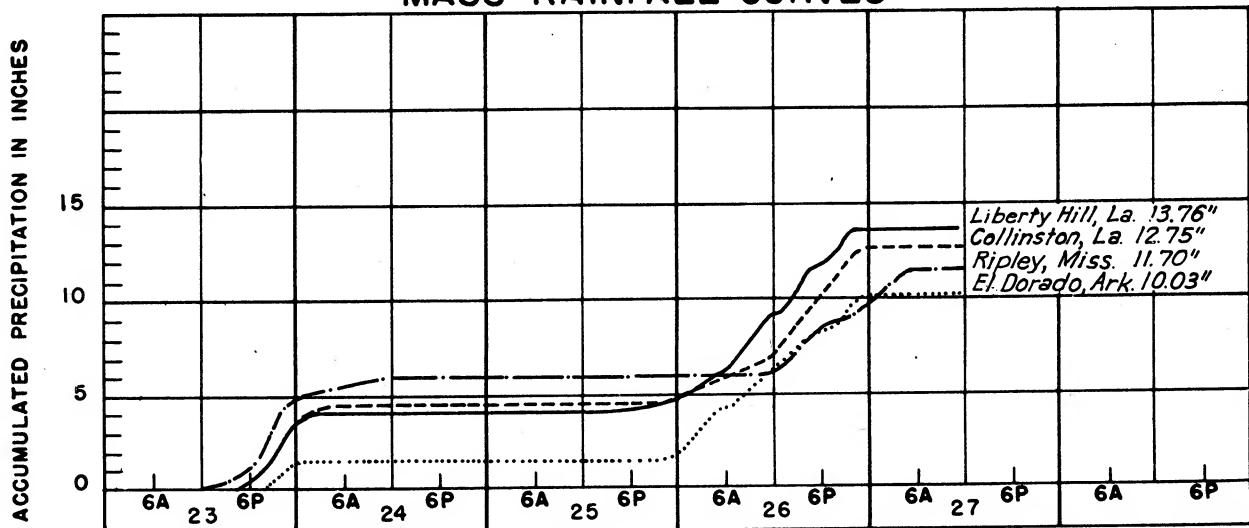
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	3.7	6.3	8.4	9.9	10.0	10.0	10.0	10.0	12.2	13.8	13.8
100	3.5	6.0	8.2	9.6	9.9	9.9	9.9	9.9	11.8	13.7	13.7
200	3.4	5.9	8.1	9.5	9.8	9.8	9.8	9.8	11.6	13.6	13.6
500	3.3	5.7	7.8	9.2	9.6	9.6	9.6	9.6	11.3	13.3	13.3
1,000	3.2	5.5	7.6	8.9	9.3	9.4	9.4	9.4	10.9	12.8	12.8
2,000	3.0	5.3	7.4	8.6	9.0	9.1	9.1	9.1	10.4	12.2	12.2
5,000	2.8	4.9	6.9	8.1	8.5	8.6	8.6	8.6	9.7	11.3	11.3
10,000	2.6	4.5	6.5	7.6	8.0	8.1	8.1	8.1	9.1	10.5	10.5
20,000	2.3	3.9	5.8	6.9	7.3	7.4	7.4	7.5	8.1	9.7	9.7
50,000	1.7	2.9	4.3	5.3	5.9	6.0	6.0	6.1	6.4	8.0	8.2
100,000	1.1	2.0	2.8	3.7	4.5	4.6	4.7	4.8	4.8	6.5	6.6

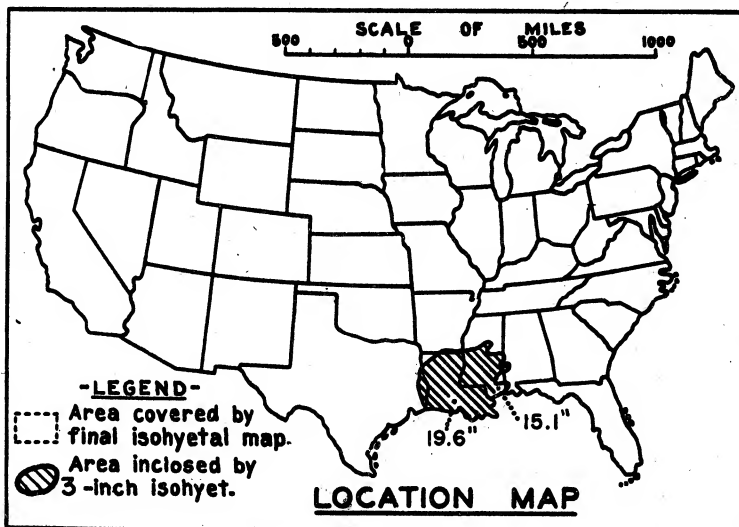
STORM STUDIES - ISOHYETAL MAP

Storm of December 23-27, 1904 Assignment LMV 3-10
Study Prepared by: Vicksburg, Miss. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 26 July - 2 Aug. 1908

Assignment L M V 3 - 14

Location South Louisiana

Study Prepared by:

Lower Mississippi Valley
Division

New Orleans District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2/20/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/14/46

Remarks: Center at

Franklin, La., and Bay St.
Louis, Miss.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	10
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	25

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

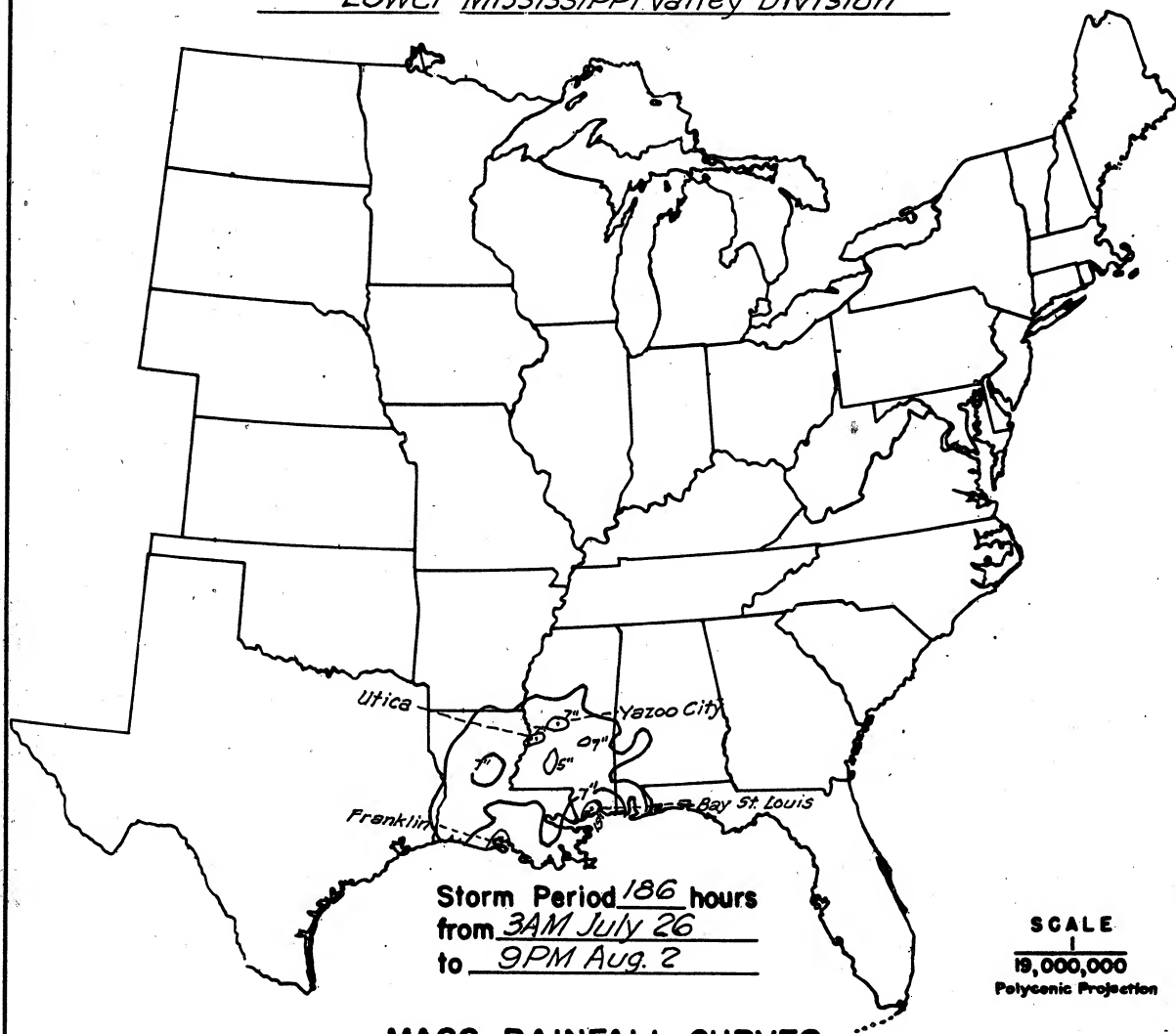
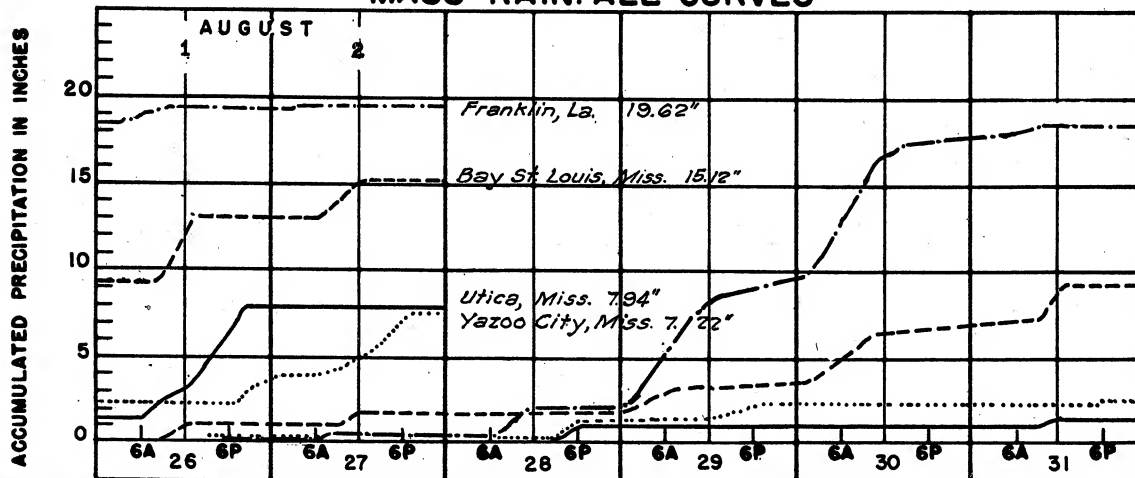
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

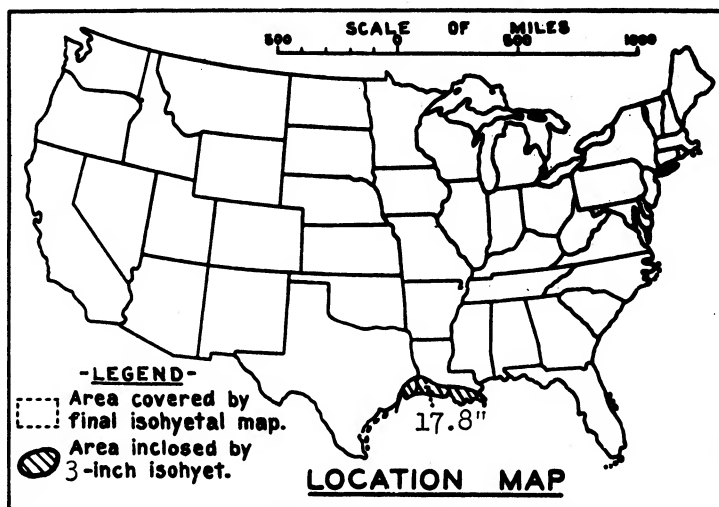
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	72	96	120	186
10	5.4	8.3	8.4	10.0	14.0	15.0	15.6	17.6	18.4	18.8	19.6
100	5.3	7.9	8.3	9.9	13.8	14.7	15.4	16.9	17.9	18.6	19.4
200	5.3	7.7	8.1	9.8	13.6	14.3	15.2	16.5	17.6	18.3	19.2
500	5.1	7.2	7.9	9.5	13.0	13.6	14.5	15.8	16.8	17.5	18.5
1,000	4.9	6.8	7.4	9.2	12.3	12.8	13.7	14.9	15.8	16.5	17.5
2,000	4.4	6.1	6.7	8.8	11.1	11.7	12.4	13.6	14.4	15.1	16.3
5,000	3.4	4.9	5.5	7.4	9.0	9.5	10.0	11.2	12.1	12.7	14.4
10,000	2.4	3.8	4.2	5.5	7.0	7.4	7.9	9.0	10.1	10.7	12.6
20,000	1.6	2.5	2.8	3.5	4.8	5.1	5.7	6.6	7.7	8.6	10.7
50,000	0.8	1.2	1.4	1.8	2.4	2.7	3.3	4.0	4.9	5.8	7.9
76,600	0.5	0.9	1.0	1.3	1.8	2.0	2.5	3.2	3.8	4.7	6.5

STORM STUDIES - ISOHYETAL MAP

Storm of July 26-August 2, 1908 Assignment LMV 3-14
Study Prepared by: New Orleans La. District
Lower Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 16-20 Sept., 1908

Assignment LMV 3-15

Location La. and Texas

Study Prepared by:

Lower Mississippi Valley
 Division, New Orleans
 District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2-10-47

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 8-8-61

Remarks: Center at Cameron,
 Louisiana, Dewpt. 76°
 Ref. Pt. 225 ESE.
 Grid J-14

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 7
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 5
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 10

PART II

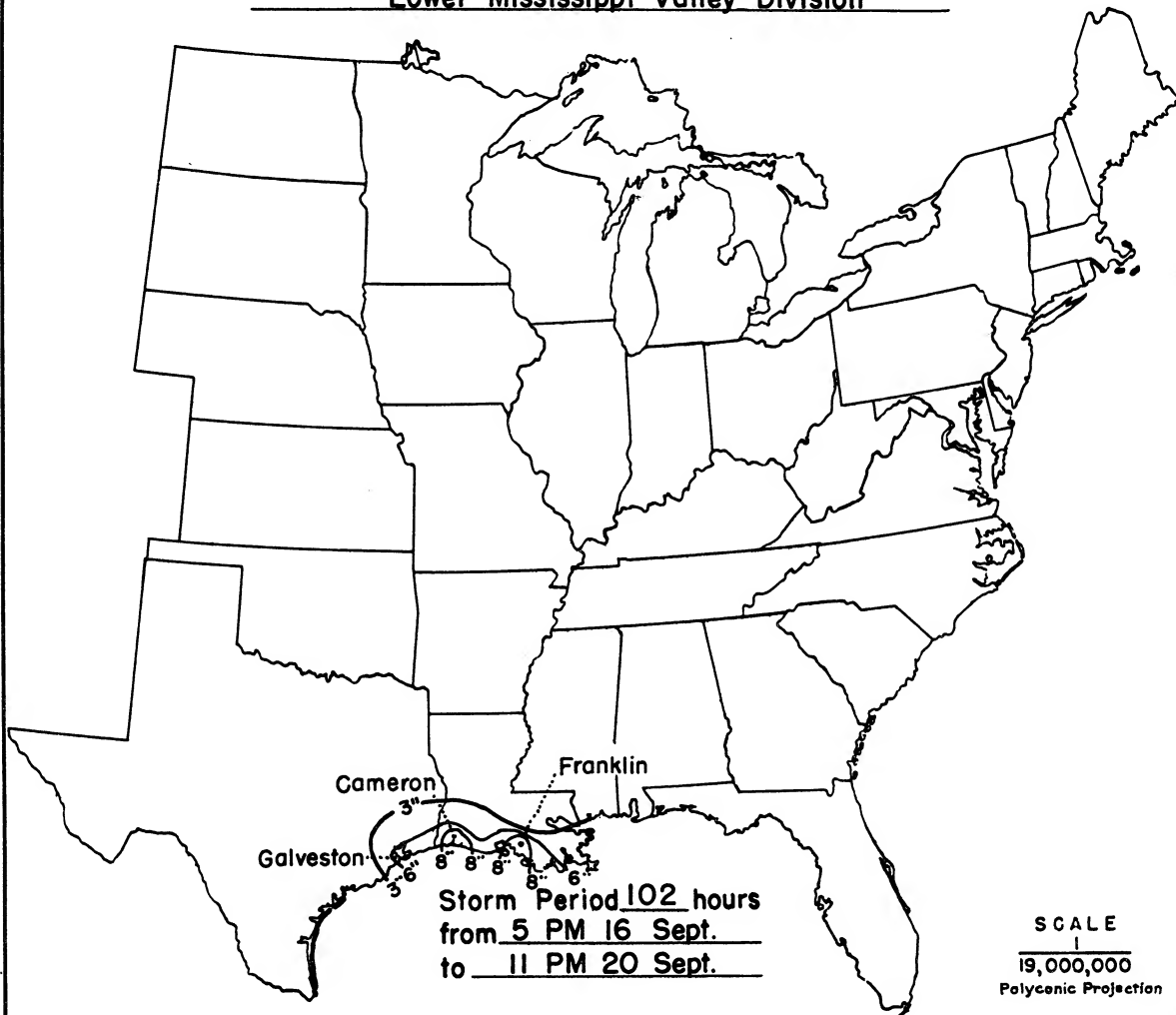
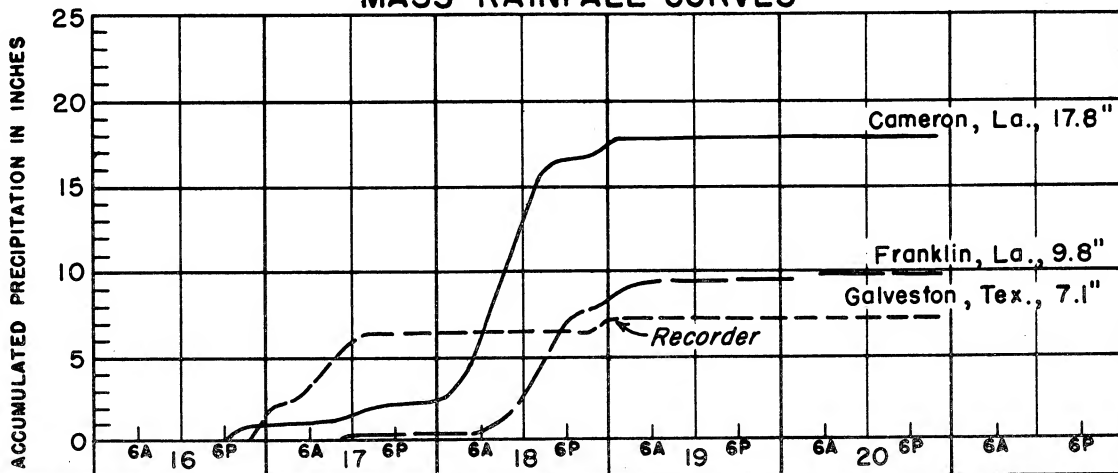
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

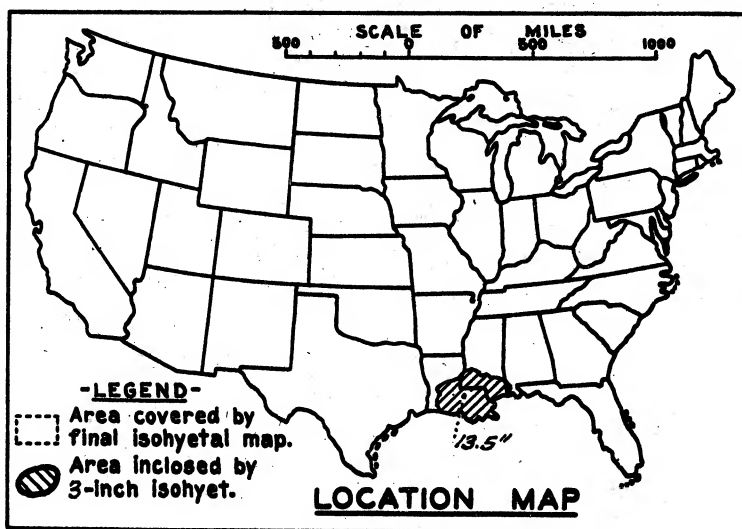
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 6
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	72	96	102
10	7.0	12.4	14.2	15.1	15.5	15.8	16.8	17.8	17.8	17.8
100	6.6	10.7	13.2	13.6	14.5	14.7	16.0	16.8	16.8	16.8
200	6.3	10.1	12.6	13.0	13.9	14.1	15.1	16.1	16.1	16.1
500	5.6	9.1	11.3	11.6	12.4	12.6	13.5	14.4	14.4	14.4
1,000	5.0	7.9	9.9	10.1	10.8	11.1	12.0	12.8	12.8	12.8
2,000	4.1	6.6	8.2	8.4	9.1	9.4	10.4	11.1	11.1	11.1
5,000	2.9	4.7	5.8	6.0	6.7	7.1	8.2	8.8	9.0	9.0
10,000	2.0	3.3	4.0	4.2	4.9	5.3	6.4	7.1	7.3	7.3
20,000	1.1	2.0	2.2	2.4	3.2	3.6	4.3	5.4	5.6	5.6
22,000	1.0	1.8	2.0	2.2	2.9	3.4	4.0	5.2	5.4	5.4

STORM STUDIES - ISOHYETAL MAPStorm of 16-20 September 1908 Assignment LMV 3-15Study Prepared by: New Orleans, La., DistrictLower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 19-22 Sept. 1909

Assignment LMV 3-16

Location Louisiana, Miss.

Study Prepared by:

Lower Mississippi Valley
Division

New Orleans District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/11/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4/16/46Remarks: Center at St.
Francisville, La.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	13
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	13
Miscl. precip. records, meteorological data, etc.....	13
Form 5002 (Mass rainfall curves).....	42

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

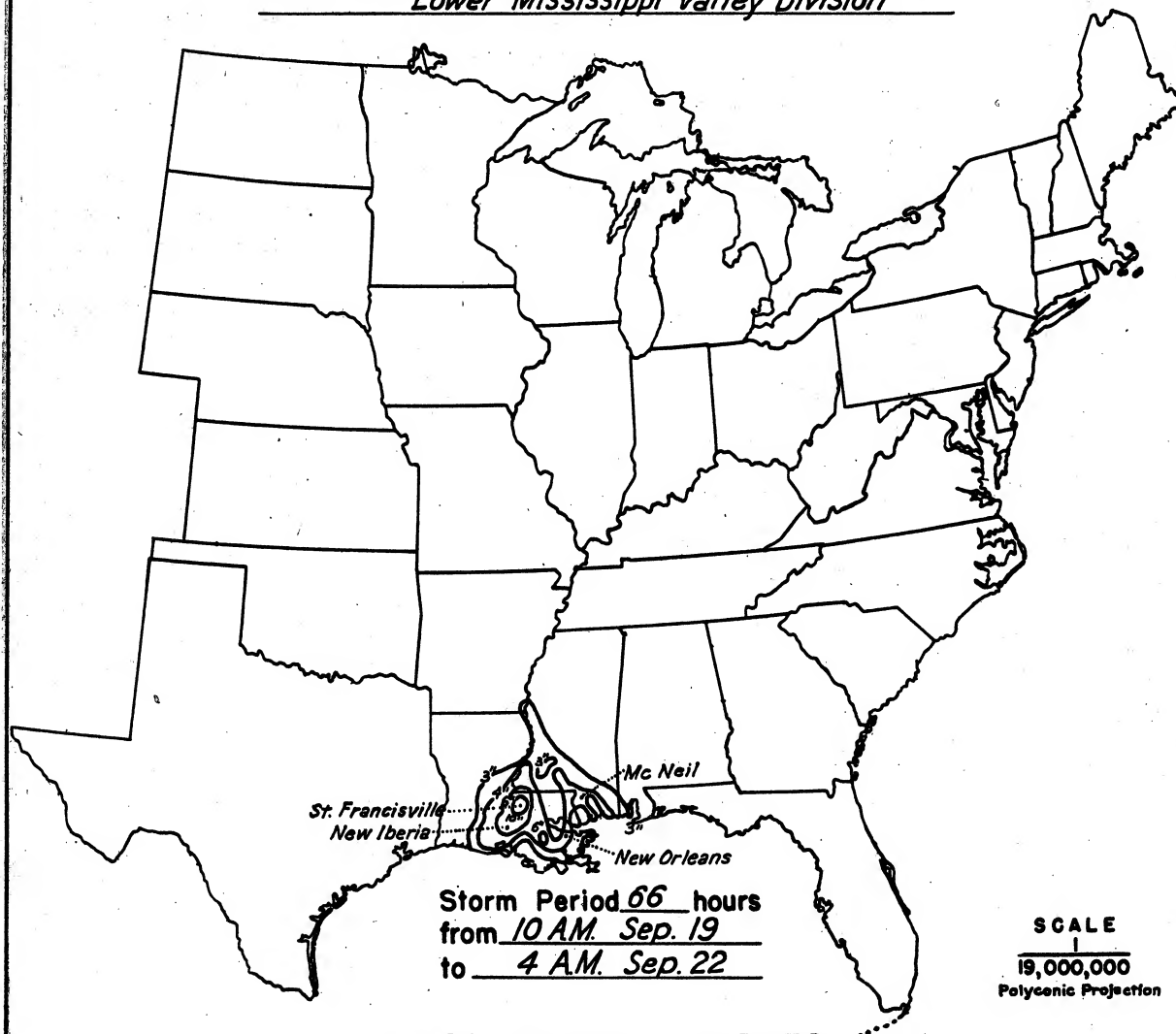
Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	3
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

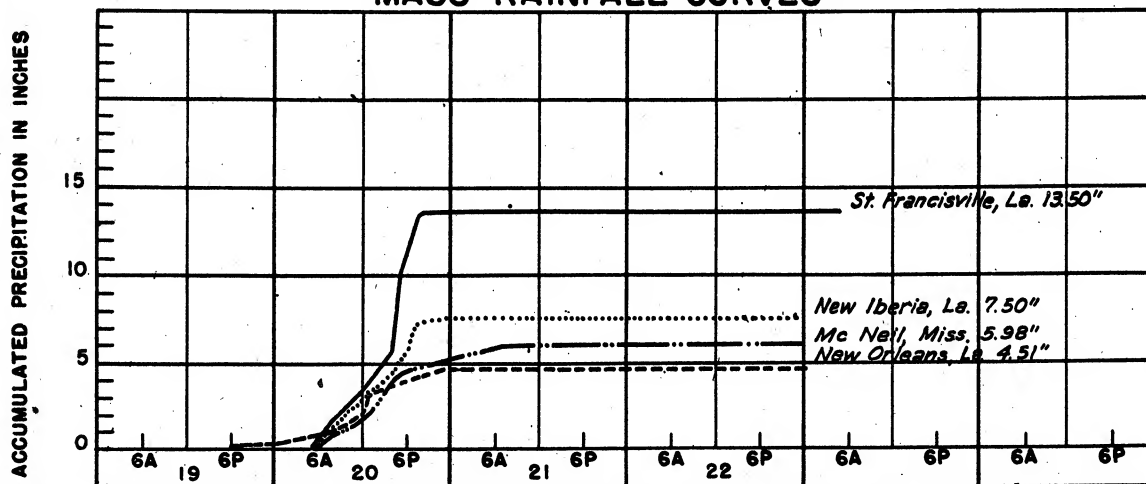
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	66	
10	8.2	11.3	13.5	13.5	13.5	13.5	13.5	13.5	
100	7.3	10.3	12.8	12.8	12.8	12.8	12.8	12.8	
200	6.9	9.8	12.4	12.4	12.4	12.4	12.4	12.4	
500	6.0	8.9	11.3	11.3	11.4	11.4	11.4	11.4	
1,000	4.9	8.0	10.1	10.2	10.3	10.4	10.4	10.4	
2,000	4.1	7.0	8.8	9.0	9.2	9.3	9.3	9.3	
5,000	3.0	5.7	7.1	7.4	7.7	7.8	7.8	7.8	
10,000	2.3	4.7	5.9	6.2	6.5	6.6	6.6	6.6	
20,000	1.9	3.7	4.6	5.0	5.3	5.4	5.4	5.4	
31,000	1.6	3.0	3.8	4.3	4.5	4.6	4.6	4.6	

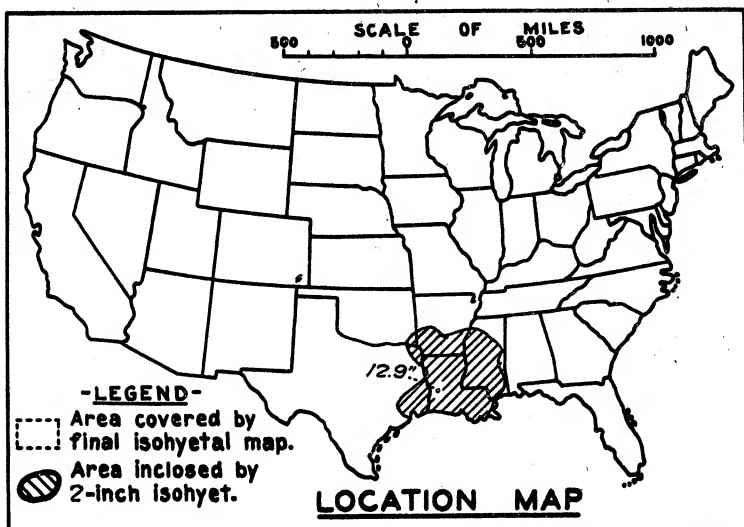
STORM STUDIES - ISOHYETAL MAP

Storm of September 19-22, 1909 Assignment LMV 3-16
Study Prepared by: New Orleans, La. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 24-28 March 1914

Assignment L M V 3 - 19

Location Southwestern La.

Study Prepared by:

Lower Mississippi Valley
Division

New Orleans District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12/18/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/21/46Remarks: Center at
Merryville, La.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	17
Form 5001-B (24-hour " ")-----	—
Form 5001-D (" " " ")-----	20
Misc. precip. records, meteorological data, etc.-----	—
Form 5002 (Mass rainfall curves)-----	42

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

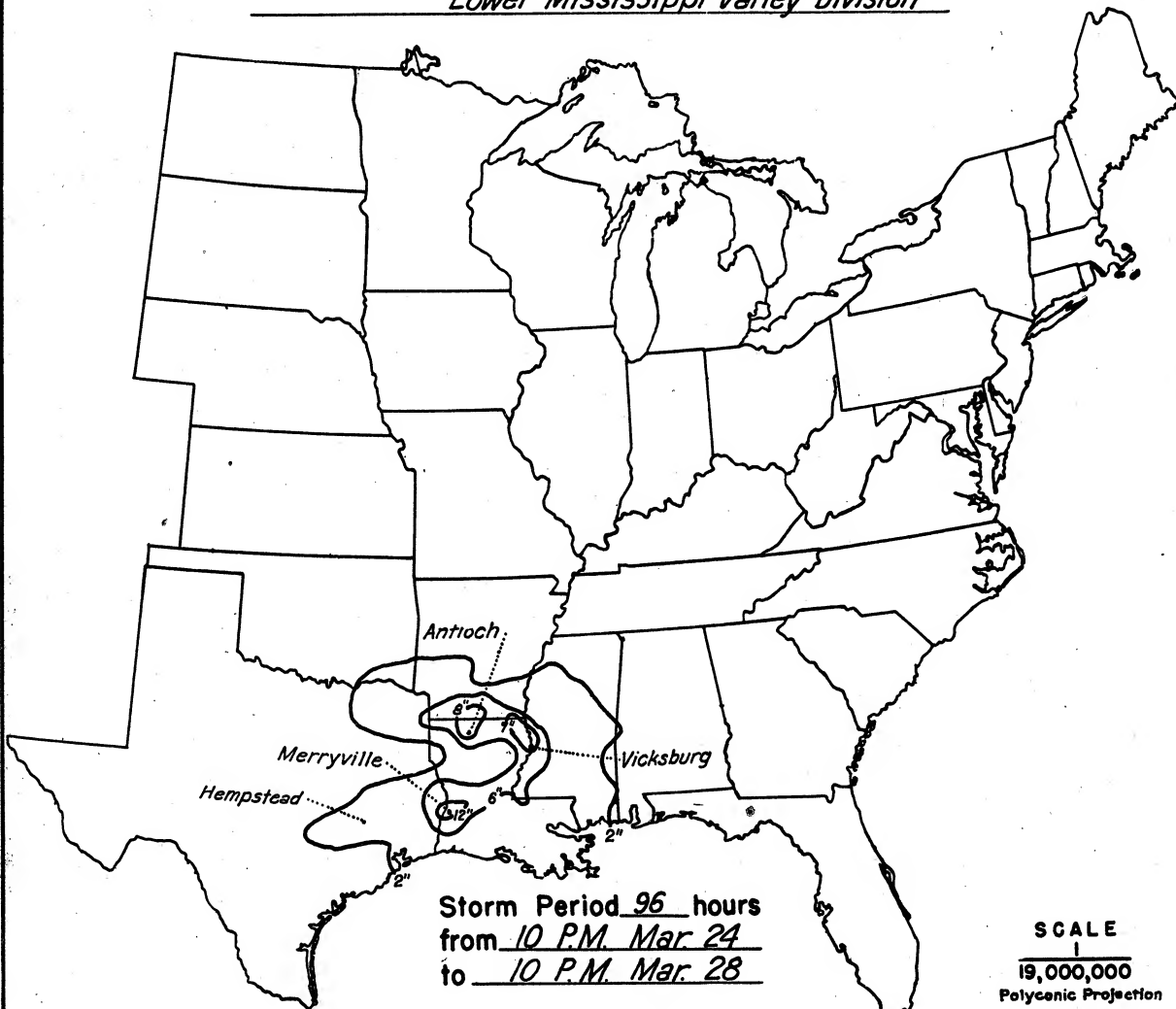
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

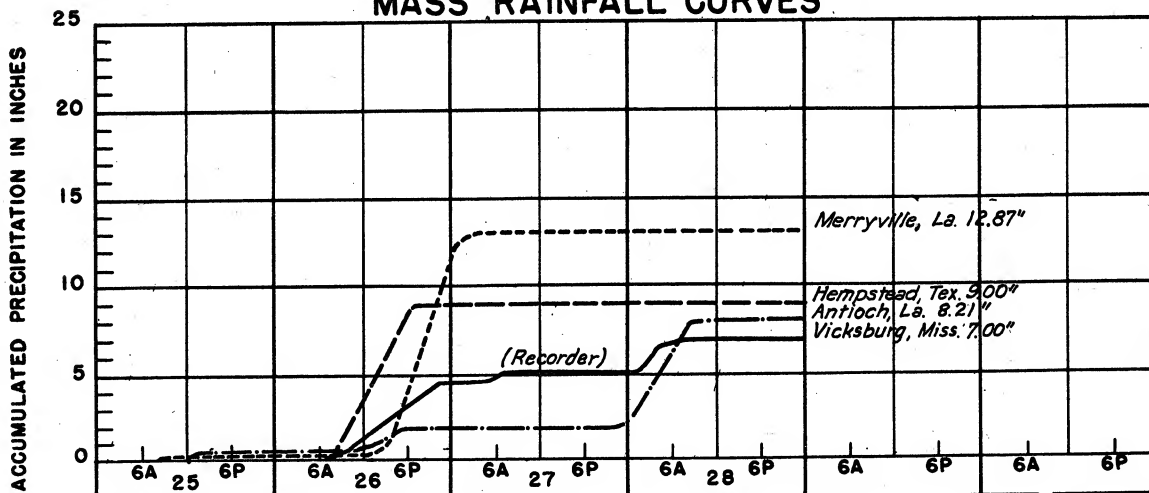
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	8.3	12.0	12.4	12.6	12.6	12.6	12.9	12.9	12.9	12.9
100	8.0	11.0	11.7	11.9	12.0	12.0	12.2	12.3	12.3	12.3
200	7.8	10.6	11.4	11.6	11.7	11.7	11.9	12.0	12.0	12.0
500	7.5	10.2	11.0	11.1	11.2	11.2	11.5	11.6	11.6	11.6
1,000	7.2	9.7	10.5	10.7	10.8	10.8	11.0	11.2	11.2	11.2
2,000	6.8	9.1	9.8	10.1	10.2	10.2	10.4	10.6	10.6	10.6
5,000	6.1	7.9	8.7	9.0	9.1	9.1	9.3	9.5	9.6	9.6
10,000	4.7	6.1	7.1	7.6	7.8	7.8	8.1	8.4	8.6	8.7
20,000	2.9	3.7	4.5	4.9	5.1	5.3	6.4	7.2	7.5	7.6
50,000	2.0	2.6	3.2	3.8	4.1	4.2	4.9	5.6	5.8	6.0
100,000	1.4	2.0	2.5	3.0	3.3	3.4	3.8	4.3	4.5	4.7
125,000	1.2	1.8	2.3	2.7	3.0	3.0	3.4	3.9	4.0	4.3

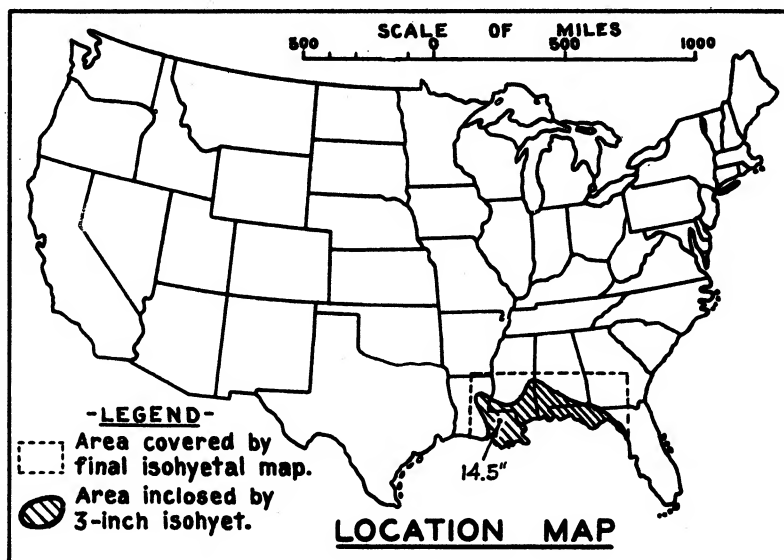
STORM STUDIES - ISOHYETAL MAP

Storm of March 24-28, 1914 Assignment LMV 3-19
Study Prepared by: New Orleans, La. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 23 - 26, 1926
 Assignment L M V 4 - 5
 Location La. Miss. Ala. & Fla.
 Study Prepared by:

Lower Mississippi Valley
 Division

New Orleans District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/13/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/23/45

Remarks: Centers at :

Donaldsonville, La. and
 Pearl River, La.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	14
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	10
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	21

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

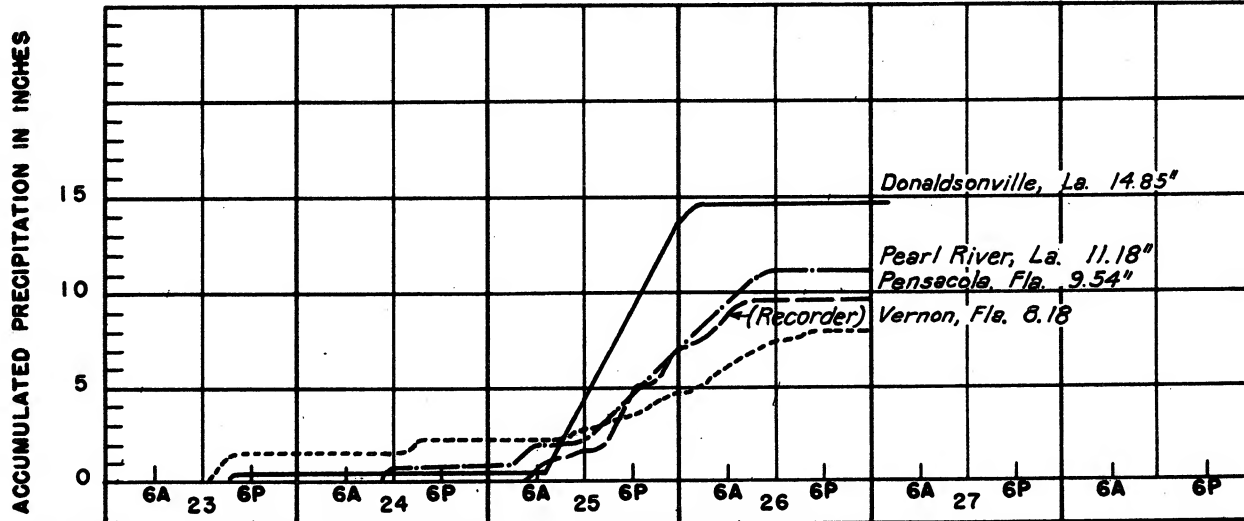
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	5.4	10.6	13.8	14.5	14.5	14.5	14.5	14.5	14.5	
100	5.0	9.7	12.8	13.6	13.6	13.6	13.7	13.7	13.7	
200	4.8	9.2	12.3	13.0	13.0	13.0	13.2	13.2	13.2	
500	4.5	8.5	11.4	12.2	12.2	12.2	12.5	12.5	12.5	
1,000	4.3	7.8	10.7	11.5	11.5	11.5	11.8	11.8	11.8	
2,000	4.0	7.0	9.7	10.5	10.6	10.6	10.7	11.0	11.0	
5,000	3.4	5.9	8.2	9.1	9.2	9.2	9.3	9.6	9.6	
10,000	2.9	5.0	7.0	7.8	7.9	8.0	8.1	8.4	8.4	
20,000	2.3	4.0	5.6	6.3	6.5	6.7	6.8	7.1	7.1	
50,000	1.4	2.7	3.6	4.3	4.5	4.7	4.8	5.0	5.0	

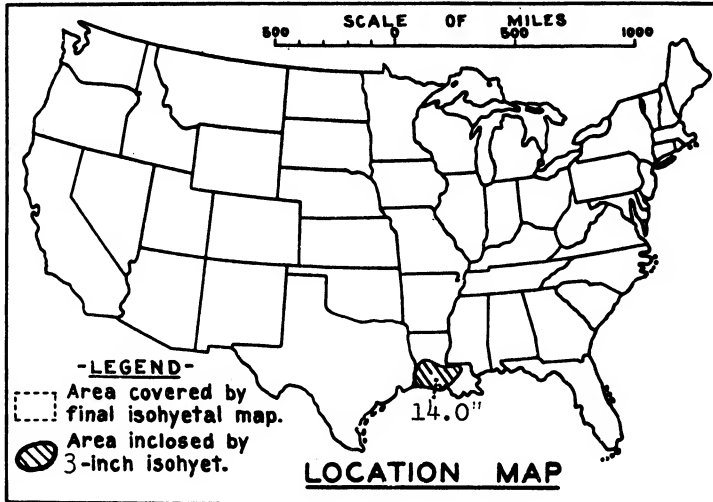
STORM STUDIES - ISOHYETAL MAP

Storm of August 23-26, 1926 Assignment LMV 4-5
Study Prepared by: New Orleans, La. District
Lower Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 20-23 May 1927

Assignment LMV 4-9

Location La., Miss., Texas

Study Prepared by:

Lower Mississippi Valley

Division, New Orleans

District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12/46Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6-13-61Remarks: Center at Kaplan,
Louisiana, Dewpt. 73

Ref. Pt. 70 E.

Grid J-13

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 12
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 9
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 16

PART II

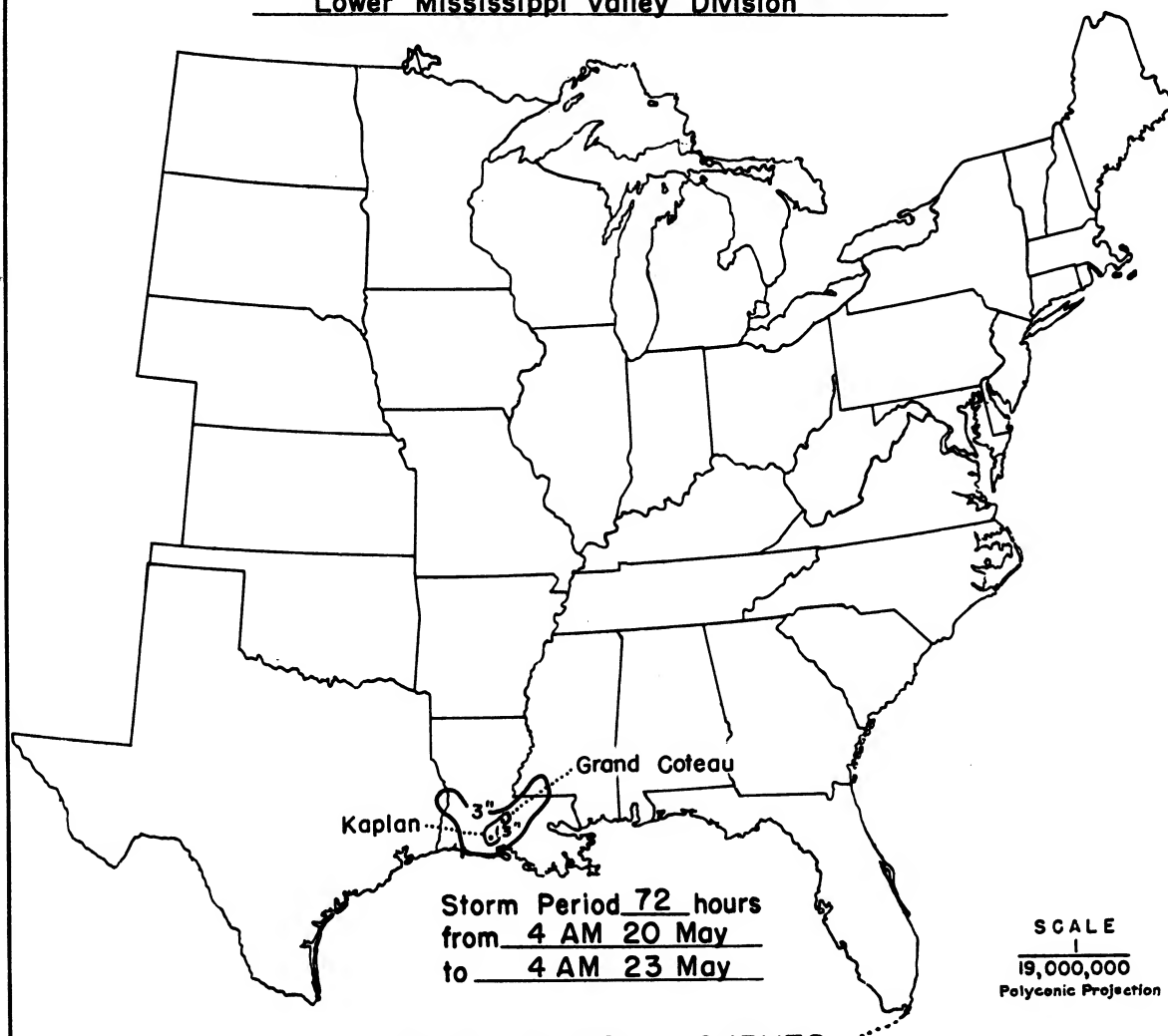
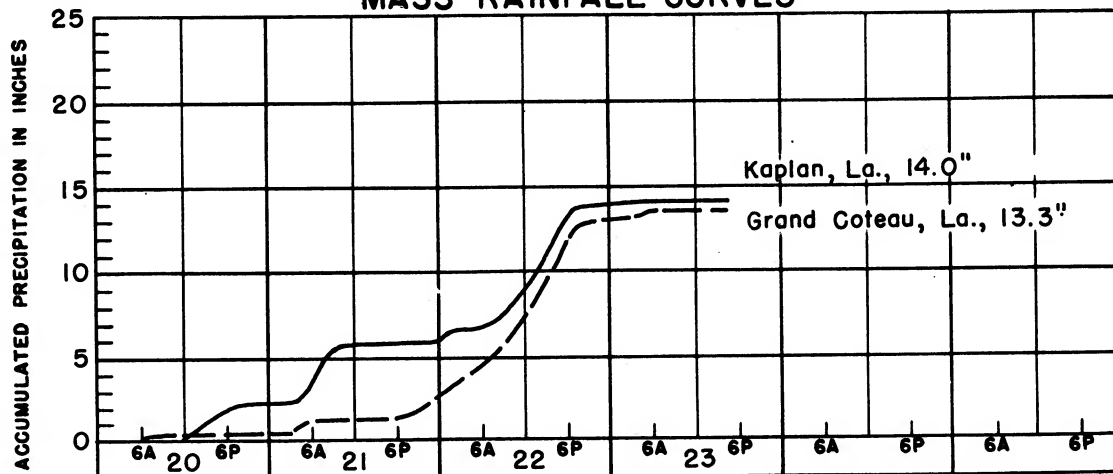
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

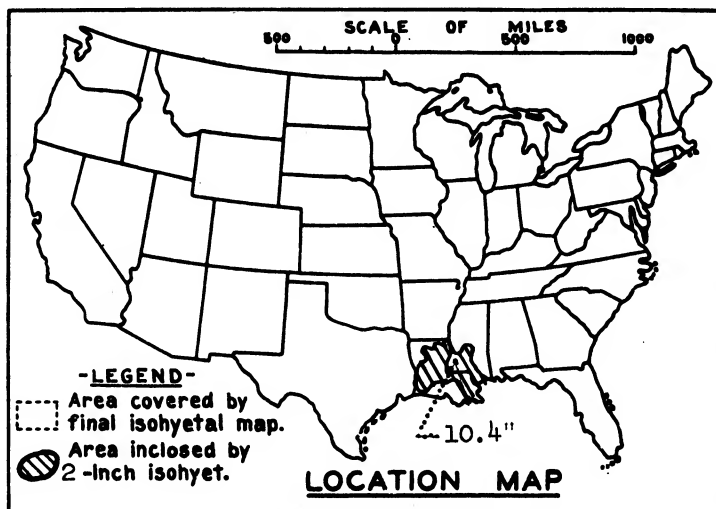
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 4
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	6.4	8.2	11.2	12.1	12.3	12.5	12.9	13.5	14.0	
100	5.7	7.4	9.7	10.4	11.0	11.7	12.6	13.3	13.9	
200	5.4	7.1	9.2	9.8	10.4	11.4	12.4	13.2	13.8	
500	5.1	6.6	8.4	8.9	9.5	10.7	11.7	12.7	13.2	
1,000	4.7	6.2	7.6	8.1	8.7	9.8	10.8	11.6	12.2	
2,000	4.2	5.5	6.7	7.2	7.6	8.5	9.4	10.1	10.7	
5,000	3.2	4.2	5.0	5.4	5.9	6.6	7.3	7.8	8.3	
10,000	2.2	3.0	3.6	3.9	4.4	5.0	5.5	6.0	6.4	
12,500	1.8	2.6	3.1	3.3	3.8	4.5	4.9	5.4	5.7	

STORM STUDIES - ISOHYETAL MAPStorm of 20-23 May 1927Assignment LMV 4-9Study Prepared by: New Orleans, La., DistrictLower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 14-16 May, 1928

Assignment LMV 4-10

Location La., Miss.

Study Prepared by:

 Lower Mississippi Valley
 Division, New Orleans District
 Office

 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8-15-46

 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 6-14-61

 Remarks: Center at Woodville,
 Mississippi

Grid I-13

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----13

Form 5001-B (24-hour " ")-----

Form 5001-D (" " " ")-----8

Misc. precip. records, meteorological data, etc.-----

Form 5002 (Mass rainfall curves)-----14

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----2

Form S-11 (Depth-area data from isohyetal map)-----1

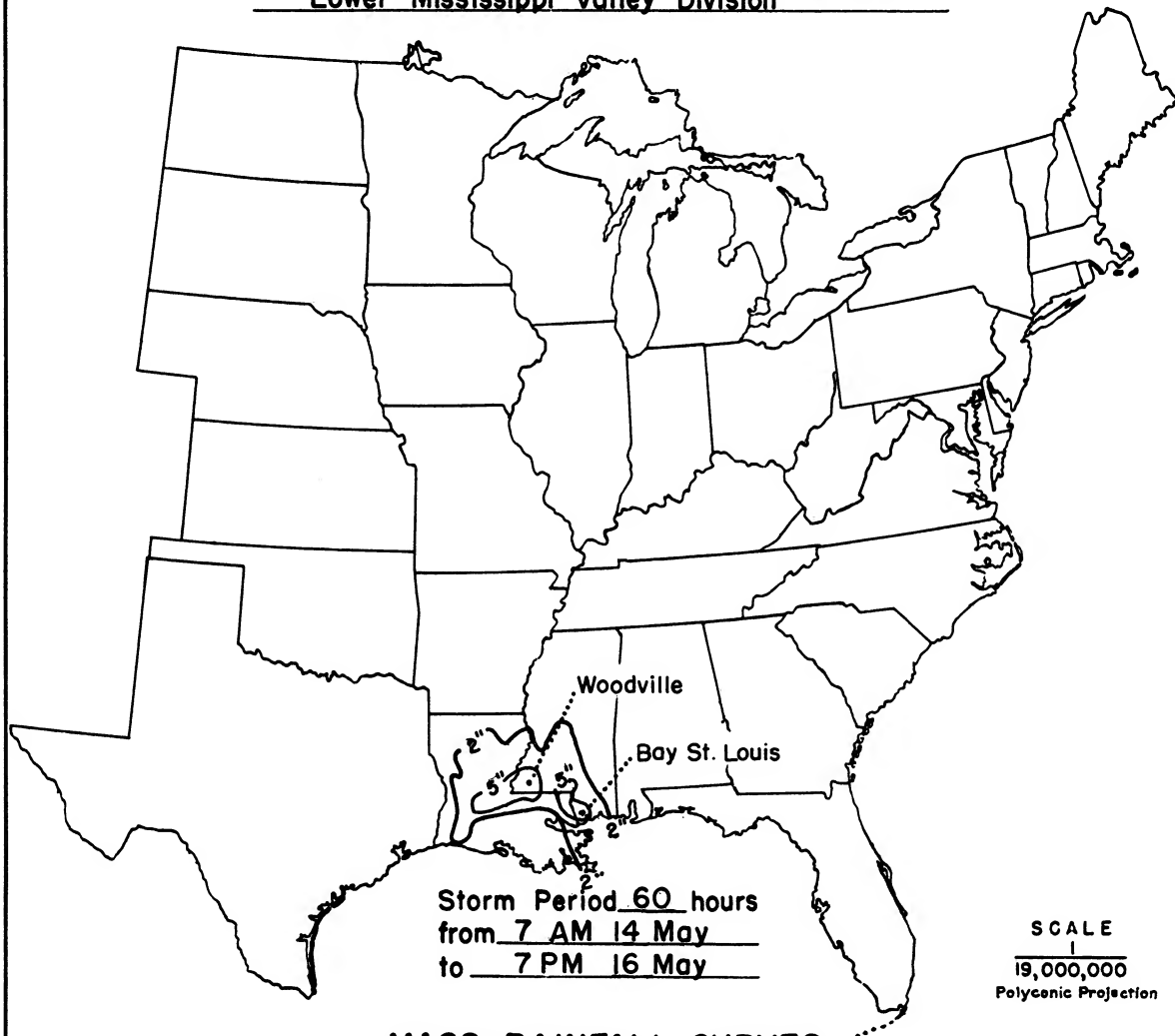
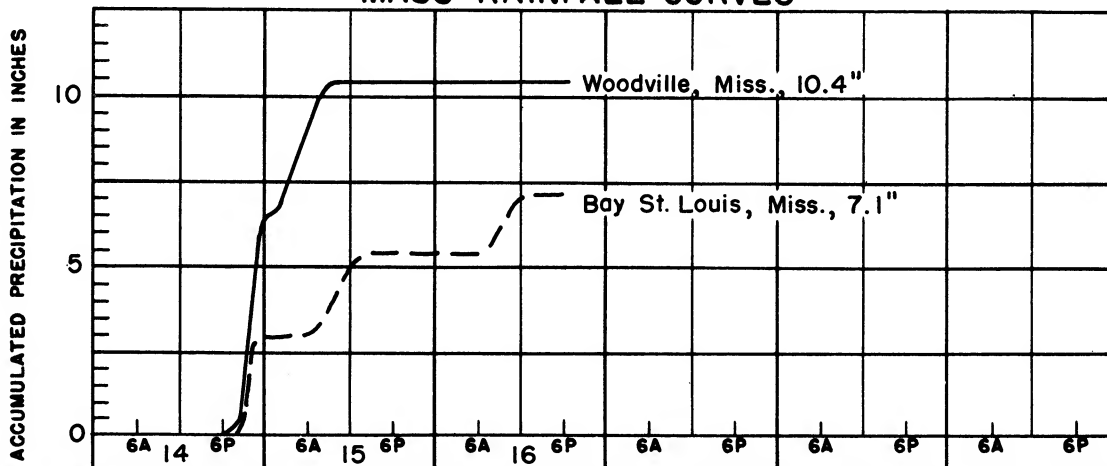
Form S-12 (Maximum depth-duration data)-----5

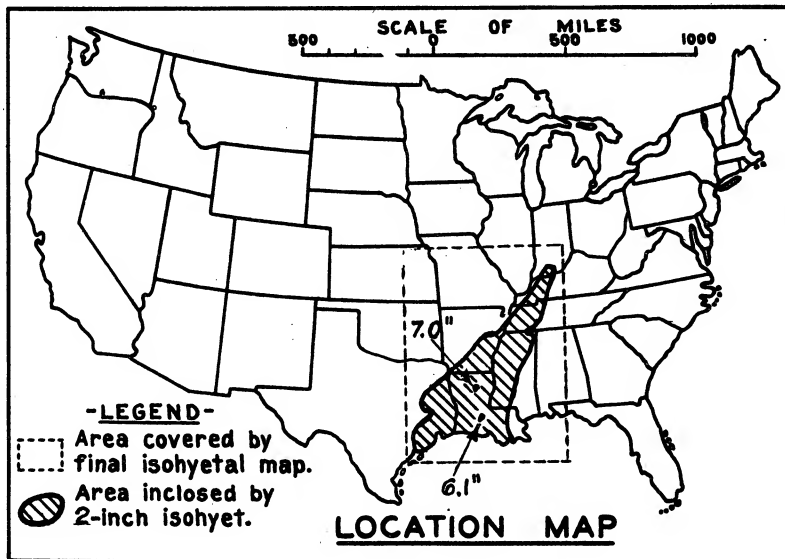
Maximum duration-depth-area curves-----1

Data relating to periods of maximum rainfall-----2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60			
10	6.4	9.9	10.4	10.4	10.4	10.4	10.4	10.4			
100	6.0	8.8	9.7	9.7	9.7	9.7	9.7	9.7			
200	5.8	8.4	9.3	9.3	9.3	9.3	9.3	9.3			
500	5.3	7.8	8.7	8.7	8.7	8.7	8.7	8.7			
1,000	4.9	7.2	8.0	8.0	8.0	8.0	8.0	8.0			
2,000	4.3	6.4	7.0	7.2	7.2	7.2	7.2	7.3			
5,000	3.5	5.0	5.6	5.9	6.1	6.2	6.2	6.2			
10,000	2.7	3.9	4.5	4.9	5.3	5.4	5.4	5.5			
20,000	1.9	2.7	3.5	3.9	4.3	4.3	4.5	4.5			
34,000	1.3	1.8	2.7	3.1	3.5	3.5	3.6	3.7			

STORM STUDIES - ISOHYETAL MAPStorm of 14-16 May 1928Assignment LMV 4-10Study Prepared by: New Orleans, La., DistrictLower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of January 11-13, 1932

Assignment LM V 4 - 16

Location La. & Miss.

Study Prepared by:

Lower Mississippi Valley
Division

New Orleans District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/29/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/30/43Remarks: Centers at
Urania, La. and
Corinth, Miss.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	20
Form 5001-B (24-hour " ")	-----	-
Form 5001-D (" " " ")	-----	15
Misc. precip. records, meteorological data, etc.	-----	-
Form 5002 (Mass rainfall curves)	-----	28

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

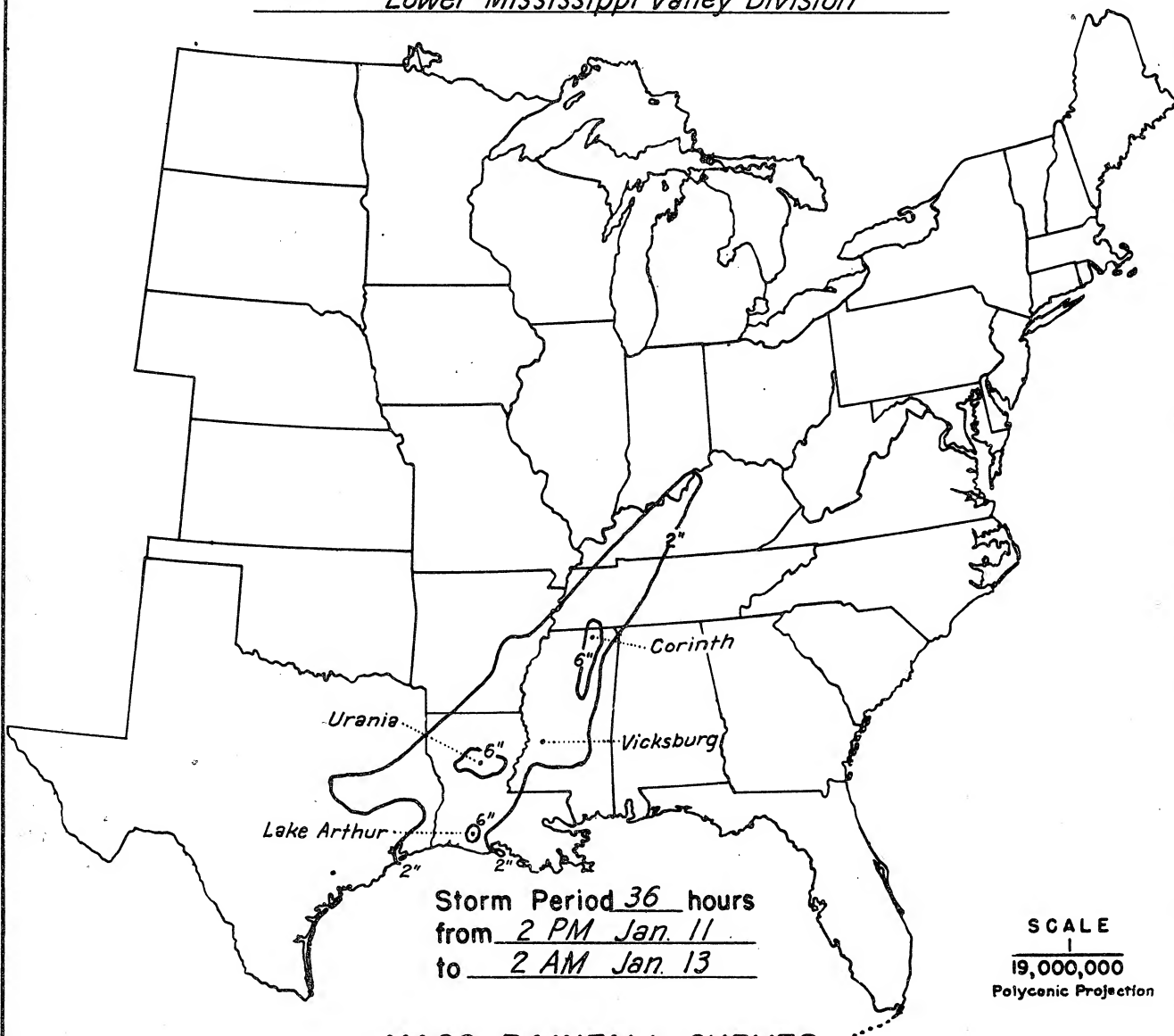
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)	-----	3
Form S-11 (Depth-area data from isohyetal map)	-----	1
Form S-12 (Maximum depth-duration data)	-----	6
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	1

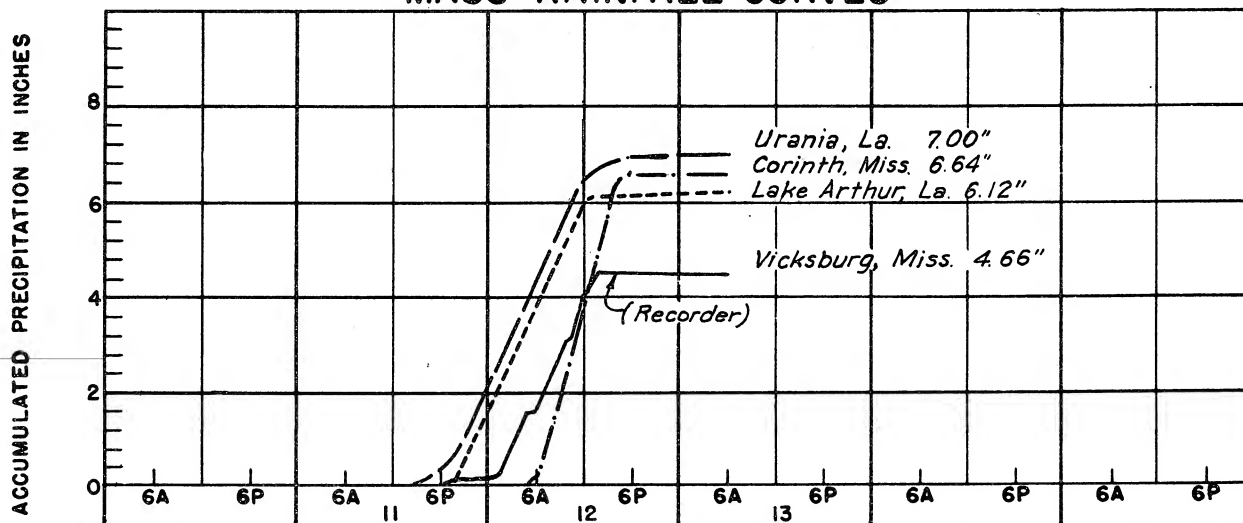
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

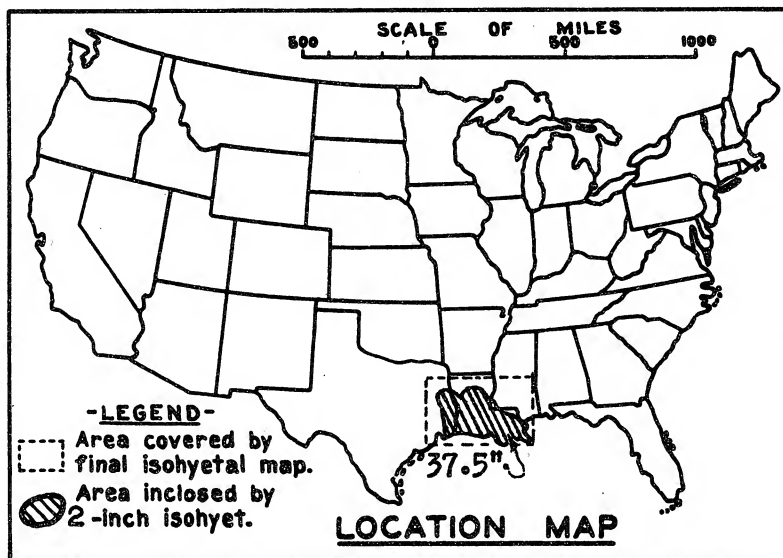
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36						
10	4.8	6.6	6.6	*7.5	*7.5	*7.5						
100	4.3	5.9	6.4	7.3	7.3	7.3						
200	4.1	5.7	6.3	7.2	7.2	7.2						
500	3.8	5.4	6.2	6.9	6.9	6.9						
1,000	3.6	5.2	6.1	6.8	6.8	6.8						
2,000	3.4	4.9	5.9	6.5	6.5	6.5						
5,000	3.0	4.7	5.6	6.0	6.1	6.1						
10,000	2.7	4.4	5.2	5.6	5.7	5.7						
20,000	2.3	4.1	4.8	5.1	5.3	5.3						
50,000	1.8	3.5	4.1	4.4	4.6	4.6						
				*Estimated								

STORM STUDIES - ISOHYETAL MAP

Storm of January 11-13, 1932 Assignment LMV 4-16Study Prepared by: New Orleans, La. District
Lower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 6 - 9, 1940

Assignment L M V 4 - 24

Location Louisiana and Texas

Study Prepared by:

Lower Mississippi Valley
Division

New Orleans District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 3/7/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/30/43Remarks: Centers at;
Miller Island, La., Beaumont,
Texas, Caney, La., and Delta
Farms, La.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data) ----- 60

Form 5001-B (24-hour " ") ----- -

Form 5001-D (" " " ") ----- 21

Misc. precip. records, meteorological data, etc. (Copies of Climatological Data)

Form 5002 (Mass rainfall curves) ----- 56

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves) ----- 4

Form S-11 (Depth-area data from isohyetal map) ----- 2

Form S-12 (Maximum depth-duration data) ----- 6

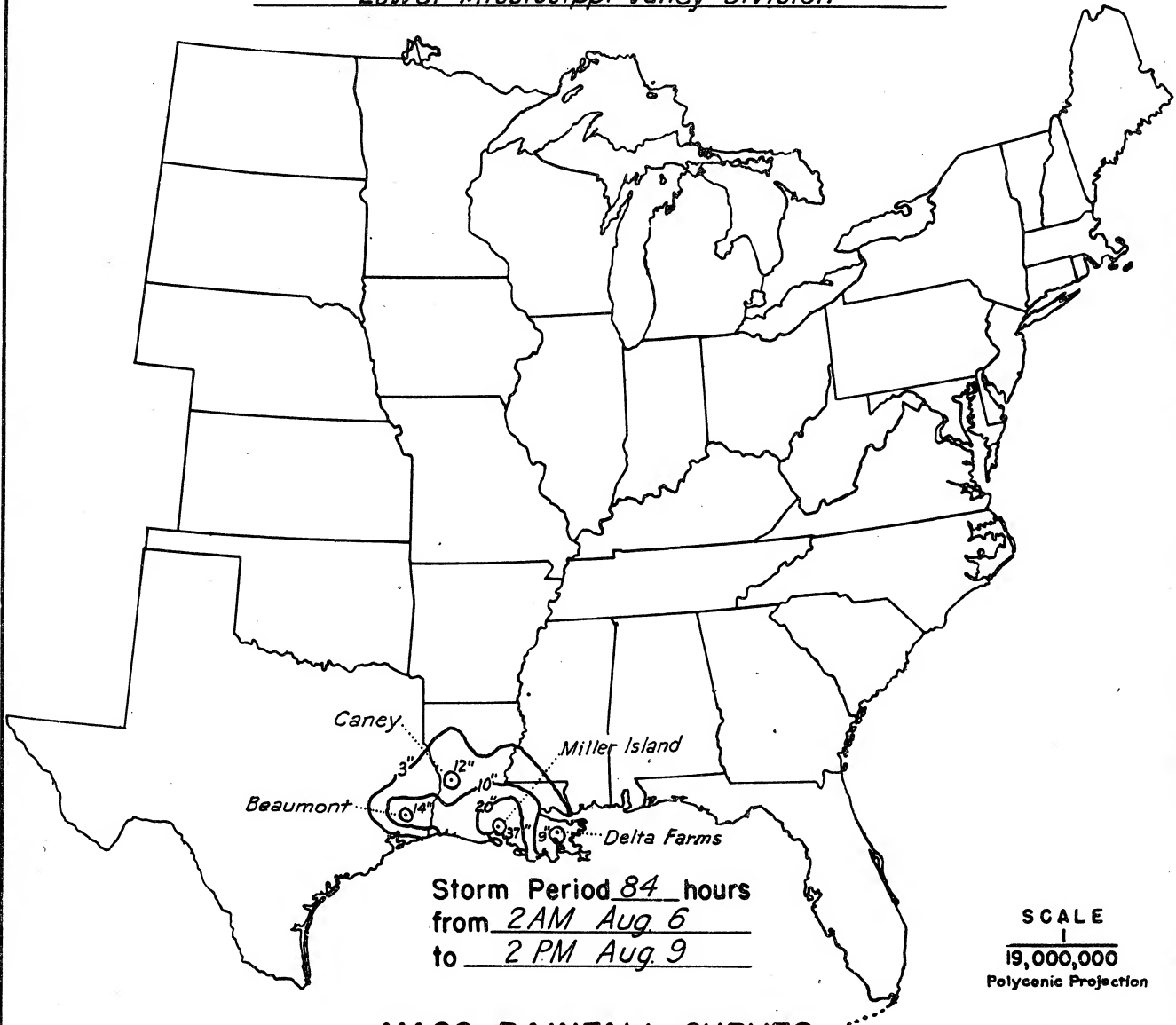
Maximum duration-depth-area curves ----- 1

Data relating to periods of maximum rainfall ----- 1

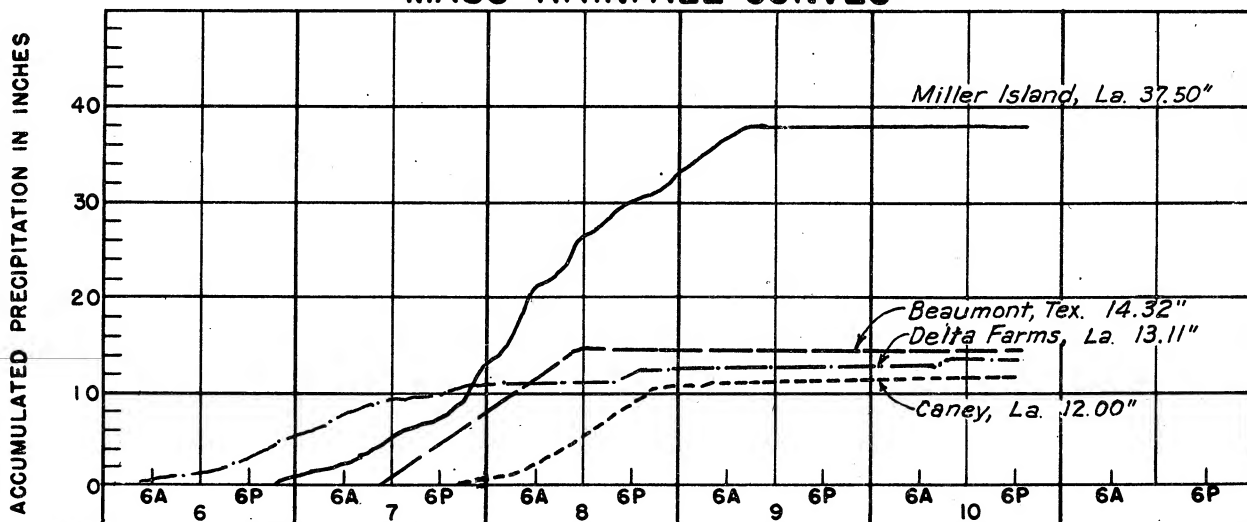
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

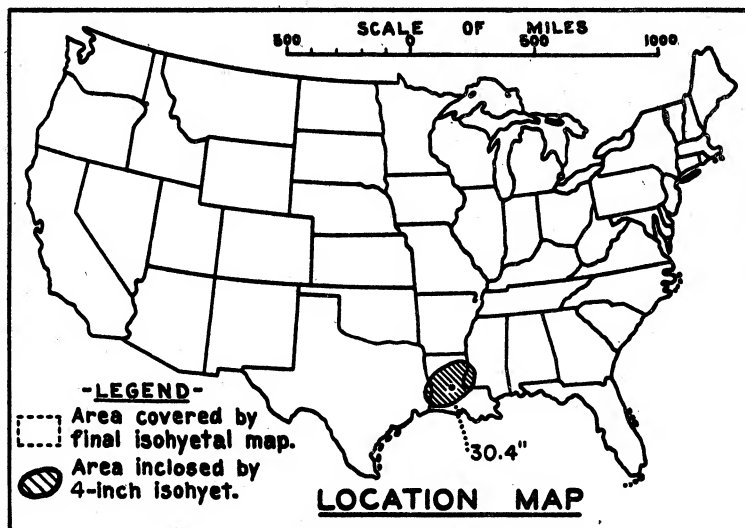
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	84	
Max. Station	8.8	16.8	19.6	23.8	26.3	29.7	35.0	37.5	37.5	37.5	
10	8.5	15.8	19.3	22.1	25.6	28.5	34.8	37.3	37.3	37.3	
20	8.4	15.5	19.1	21.7	25.2	28.1	34.1	36.8	36.8	36.8	
100	8.0	14.5	18.4	20.7	24.1	27.1	32.6	35.2	35.2	35.2	
200	7.8	13.4	17.8	20.3	23.5	26.5	31.9	34.5	34.5	34.5	
500	6.9	12.0	16.2	19.4	22.7	25.6	30.3	33.5	33.6	33.6	
1,000	6.0	10.9	14.5	18.4	21.7	24.6	28.8	31.9	32.2	32.2	
2,000	5.0	8.9	12.6	16.7	19.9	22.7	26.3	29.2	29.5	29.5	
5,000	3.7	6.4	9.1	12.3	14.9	17.1	20.3	22.6	22.9	22.9	
10,000	2.6	4.6	6.3	8.5	10.5	12.1	15.0	16.8	17.2	17.2	
20,000	1.5	3.0	4.1	5.5	6.6	7.6	10.1	11.7	12.6	12.7	
36,200	1.0	2.0	3.0	4.0	4.8	5.6	7.3	8.4	9.0	9.1	

STORM STUDIES - ISOHYETAL MAP

Storm of August 6-9, 1940 Assignment LMV 4-24Study Prepared by: New Orleans, La. District
Lower Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 13-17 June 1886

Assignment LMV 4-27

Location Louisiana

Study Prepared by:

Lower Miss. Valley Division
 Vicksburg District Office
 and U. S. Weather Bureau

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/29/39

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/29/46

Remarks: Center at Alexandria,
 La.

DATA AND COMPUTATIONS COMPILED**PART I**Preliminary isohyetal map, in -- sheet, scale ---

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)	---
Form 5001-B (24-hour " ")	8
Form 5001-D (" " " ")	---
Misc. precip. records, meteorological data, etc.	42
Form 5002 (Mass rainfall curves)	9

PART IIFinal isohyetal maps, in 1 sheet, scale 1:500,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)	---
Form S-11 (Depth-area data from isohyetal map)	---
Form S-12 (Maximum depth-duration data)	---
Maximum duration-depth-area curves	1
Data relating to periods of maximum rainfall	---

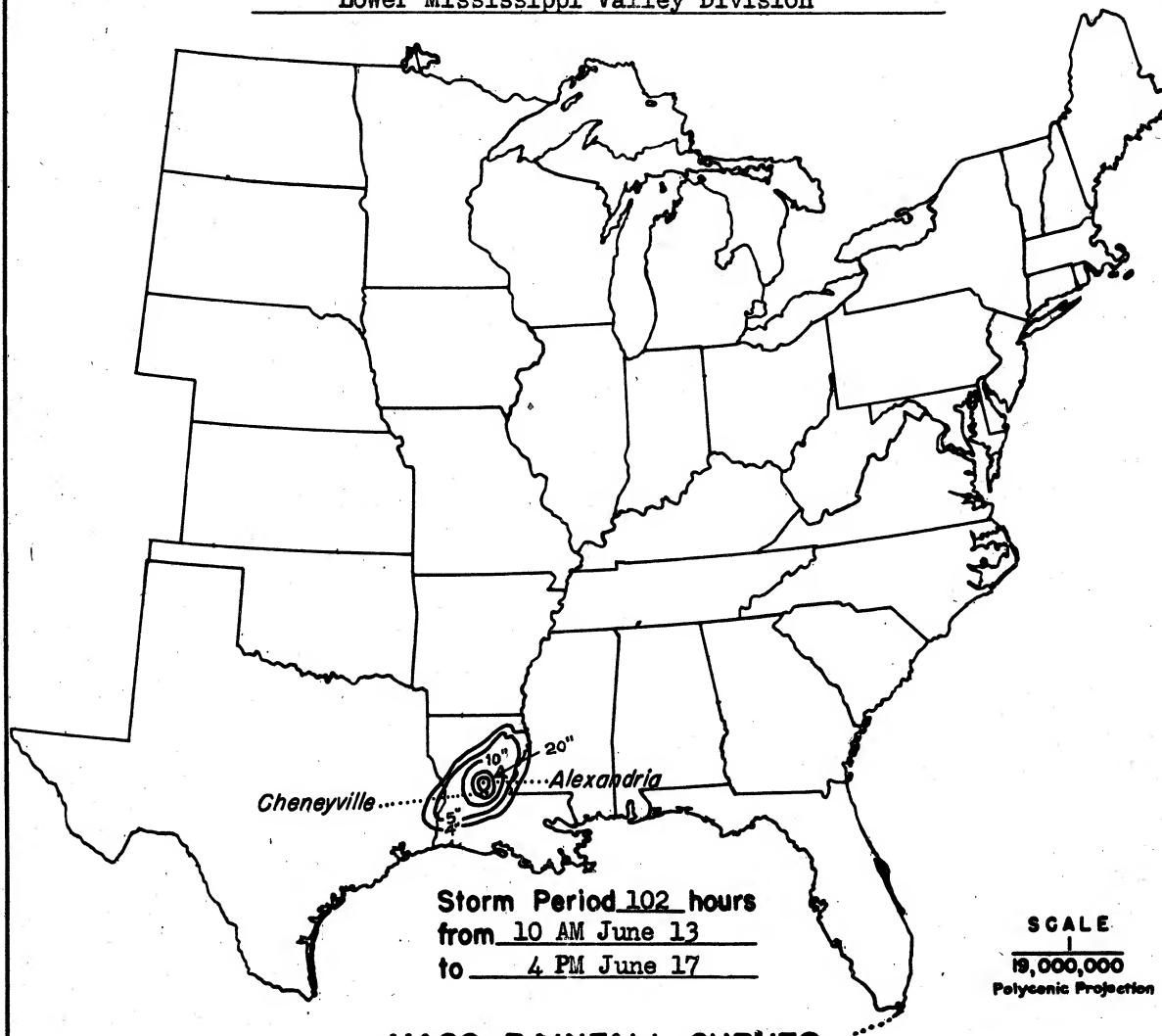
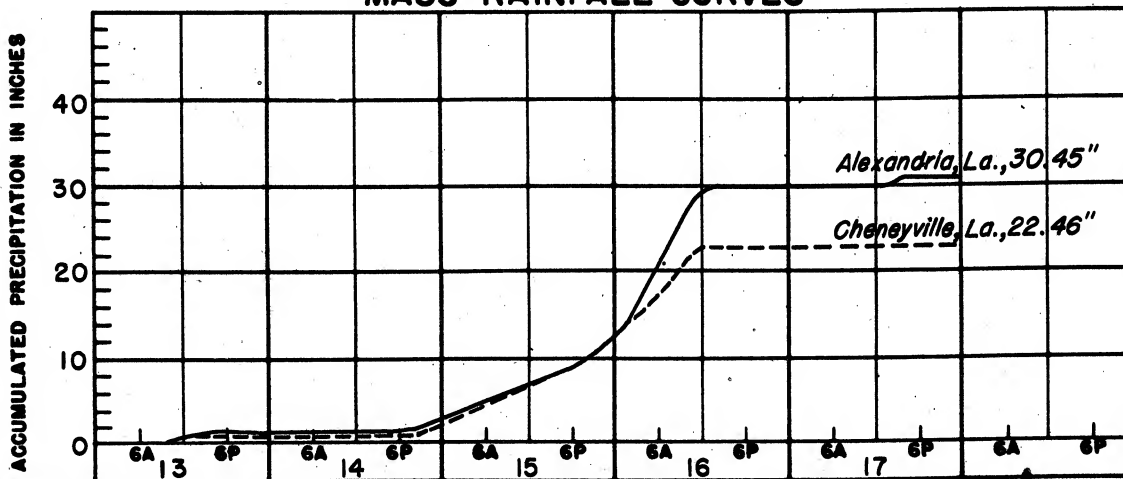
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

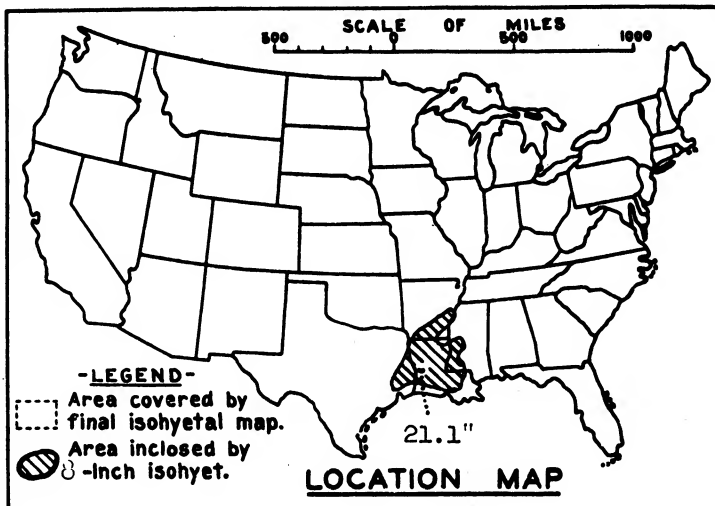
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	102
10	11.5	17.6	20.6	22.3	24.4	26.4	28.5	28.5	29.0	29.8	30.4
100	11.5	17.5	20.5	22.2	24.3	26.3	28.4	28.4	28.8	29.6	30.2
200	11.4	17.4	20.4	22.0	24.1	26.1	28.2	28.2	28.6	29.4	30.0
500	11.1	17.0	19.9	21.5	23.6	25.5	27.5	27.5	28.0	28.7	29.3
1,000	10.4	15.8	18.6	20.1	22.0	23.8	25.6	25.7	26.1	26.8	27.3
2,000	8.9	13.6	16.0	17.3	18.9	20.4	22.0	22.1	22.4	23.1	23.5
5,000	6.4	9.8	11.5	12.4	13.6	14.7	15.9	15.9	16.1	16.6	16.9
6,900	5.6	8.5	10.0	10.8	11.8	12.8	13.8	13.8	14.0	14.4	14.7

Results based primarily on official record at Alexandria, La.
 with areal distribution estimated from limited data.

STORM STUDIES - ISOHYETAL MAP

Storm of June 13-17, 1886 Assignment LMV 4-27
Study Prepared by: Vicksburg, Miss., District
Lower Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 23 April - 4 May 1953

Assignment LMV 5-3

Location La., Miss., Ark., Tex.

Study Prepared by:

Lower Mississippi Valley

Division, New Orleans District
OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 4-10-58Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6-13-61

Remarks:

Center at Camp Polk, La.

Dewpt 73° - Ref Pt 50 ESE

Grid H-13

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 4 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 59

Form 5001-B (24-hour " ")----- 49

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 87

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 21

Form S-11 (Depth-area data from isohyetal map)----- 3

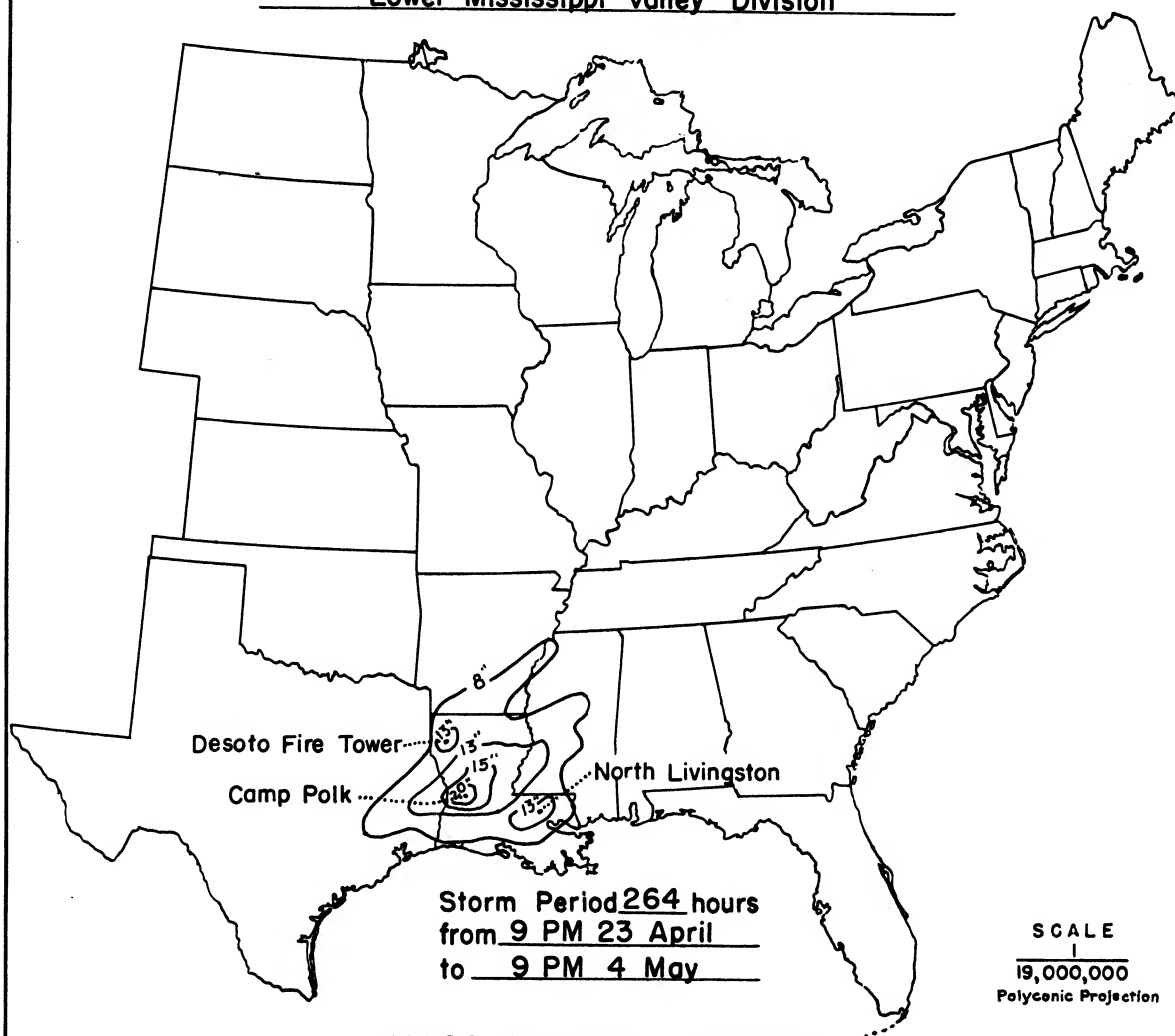
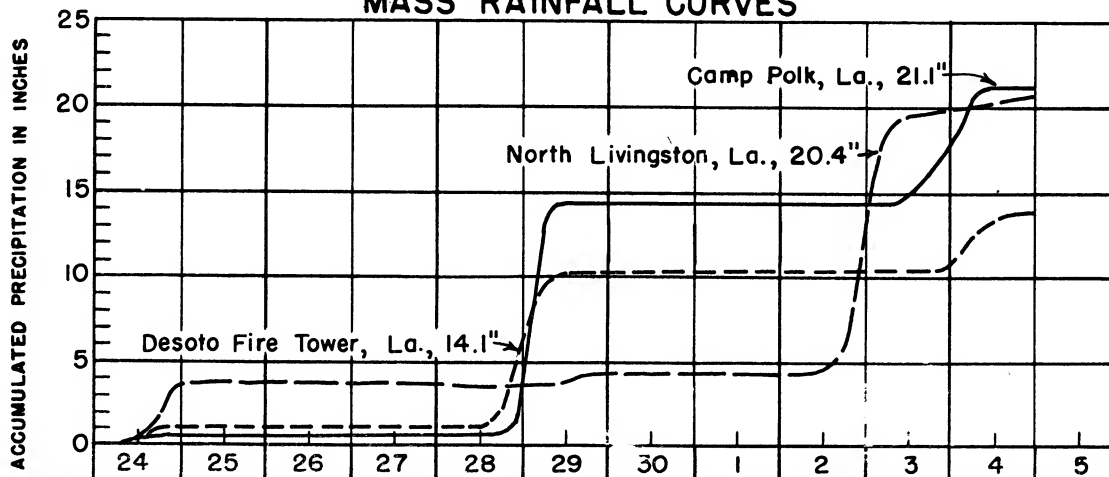
Form S-12 (Maximum depth-duration data)----- 36

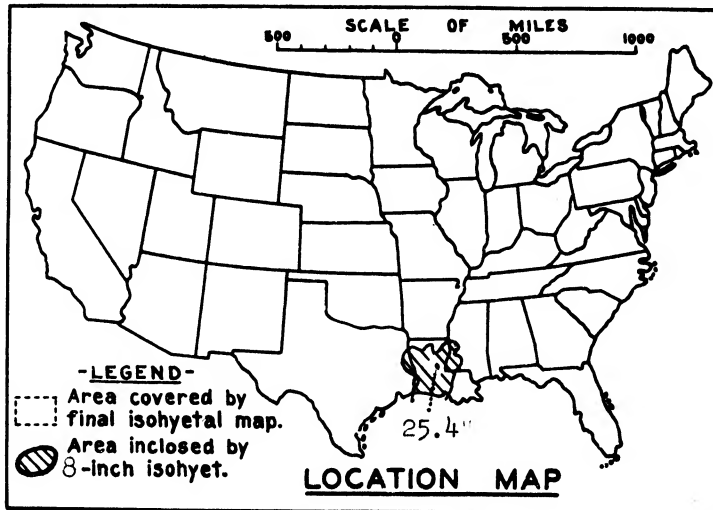
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 6

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	72	96	120	144	264
10	8.0	13.2	15.0	15.5	15.7	15.7	16.2	16.2	16.2	20.0	21.1
100	7.6	11.7	13.5	13.8	14.0	14.0	14.2	14.2	14.5	19.1	20.1
200	7.3	11.2	12.9	13.3	13.4	13.4	13.5	13.5	13.9	18.6	19.6
500	6.8	10.5	12.1	12.5	12.5	12.5	12.6	12.6	13.1	17.6	18.9
1000	6.3	9.8	11.4	11.8	11.8	11.8	11.8	11.8	12.5	16.8	18.1
2000	5.7	9.0	10.5	11.0	11.0	11.0	11.0	11.0	11.7	15.8	17.2
5000	4.7	7.6	9.1	9.7	9.7	9.7	9.7	9.7	10.6	14.3	15.8
10000	3.9	6.4	7.8	8.7	8.7	8.7	8.7	8.7	9.5	13.0	14.5
20000	3.0	5.0	6.4	7.4	7.4	7.4	7.4	7.4	8.2	11.4	13.3
50000	1.8	3.1	4.1	4.8	5.1	5.4	5.4	5.4	6.1	8.8	11.3
70000	1.3	2.4	3.2	3.6	4.1	4.4	4.4	4.4	5.3	7.7	10.5

STORM STUDIES - ISOHYETAL MAPStorm of 23 April - 4 May 1953Assignment LMV 5-3Study Prepared by: New Orleans, La., District
Lower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 11-19 May 1953

Assignment LMV 5-4

Location La., Miss., Tex.

Study Prepared by:

Lower Mississippi Valley

Division, New Orleans

District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6-15-56Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6-13-61Remarks: Center at Harrison-
burg Dam, Louisiana
Dewpt 74° Ref Pt 50 S of
Alexandria, Louisiana
Grid I-13**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 4 sheets, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 48
 Form 5001-B (24-hour " ")----- 41
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 46

PART II

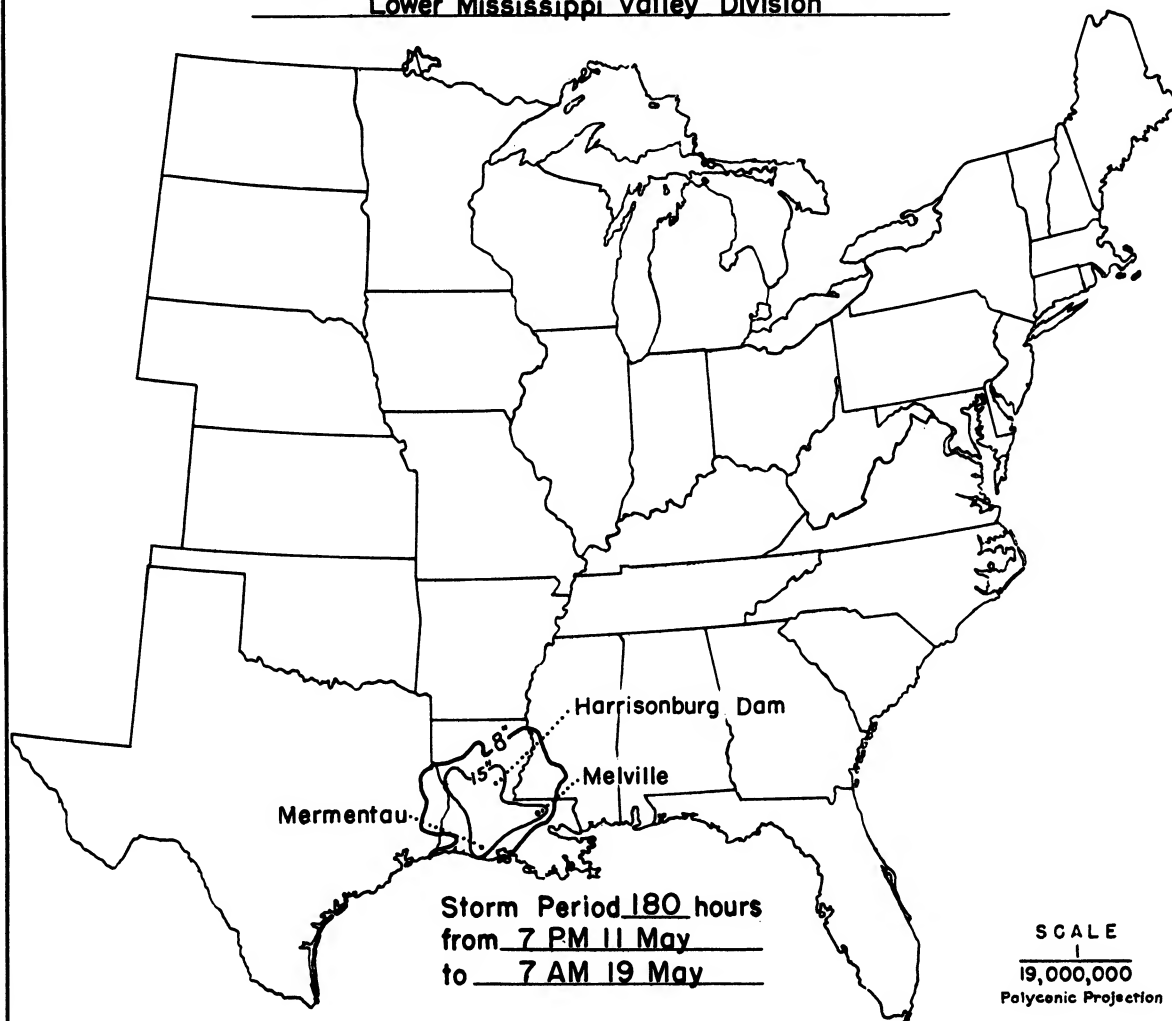
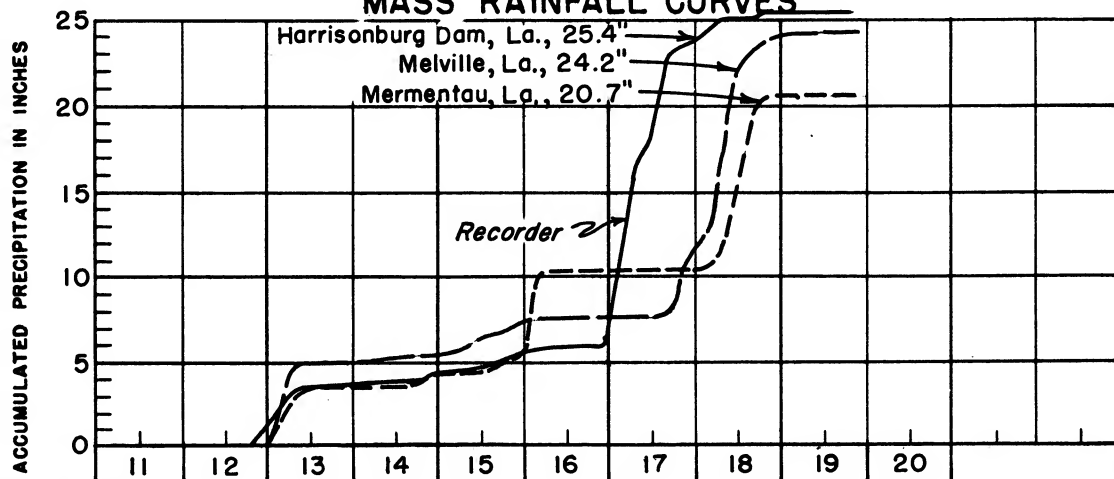
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

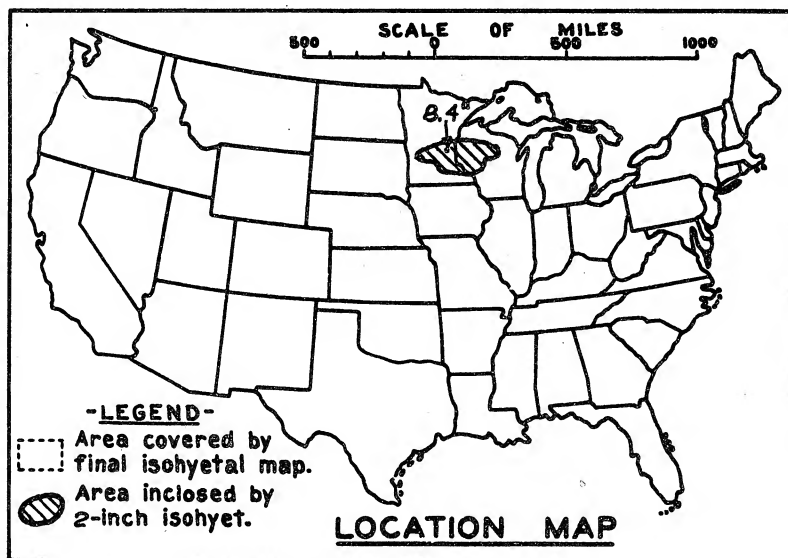
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 10
 Form S-11 (Depth-area data from isohyetal map)----- 2
 Form S-12 (Maximum depth-duration data)----- 18
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	72	96	120	144	180
10	9.2	11.7	17.5	18.0	19.2	19.6	20.4	21.3	23.7	25.4	25.4
100	8.3	10.9	16.5	17.4	18.3	18.7	19.5	20.3	22.6	24.2	24.2
200	7.9	10.5	15.9	16.8	17.7	18.2	19.0	19.9	22.1	23.6	23.7
500	7.2	9.6	14.6	15.5	16.6	17.0	18.0	18.9	21.2	22.6	22.8
1,000	6.5	8.7	13.0	14.0	15.4	15.8	16.9	17.9	20.0	21.8	22.0
2,000	5.7	7.6	11.3	12.3	13.9	14.5	15.8	16.8	18.7	20.9	21.1
5,000	4.5	6.1	8.9	9.9	11.6	12.7	14.0	15.2	16.7	19.3	19.6
10,000	3.5	4.9	6.9	8.0	9.7	11.1	12.6	13.7	15.0	17.7	18.0
20,000	2.4	3.6	5.0	6.1	7.7	9.2	10.7	12.0	12.9	15.5	16.0
40,000	1.4	2.3	3.0	4.3	5.6	6.8	8.1	9.3	10.0	12.1	12.7

STORM STUDIES - ISOHYETAL MAPStorm of 11-19 May 1953Assignment LMV 5-4Study Prepared by: New Orleans, La., DistrictLower Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 24 - 28, 1892

Assignment U. M. V. 1 - 1

Location Minn. - Wis.

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8/8/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/19/45

Remarks: Center at:

Minneapolis, Minn.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	4
Form 5002 (Mass rainfall curves)-----	10

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

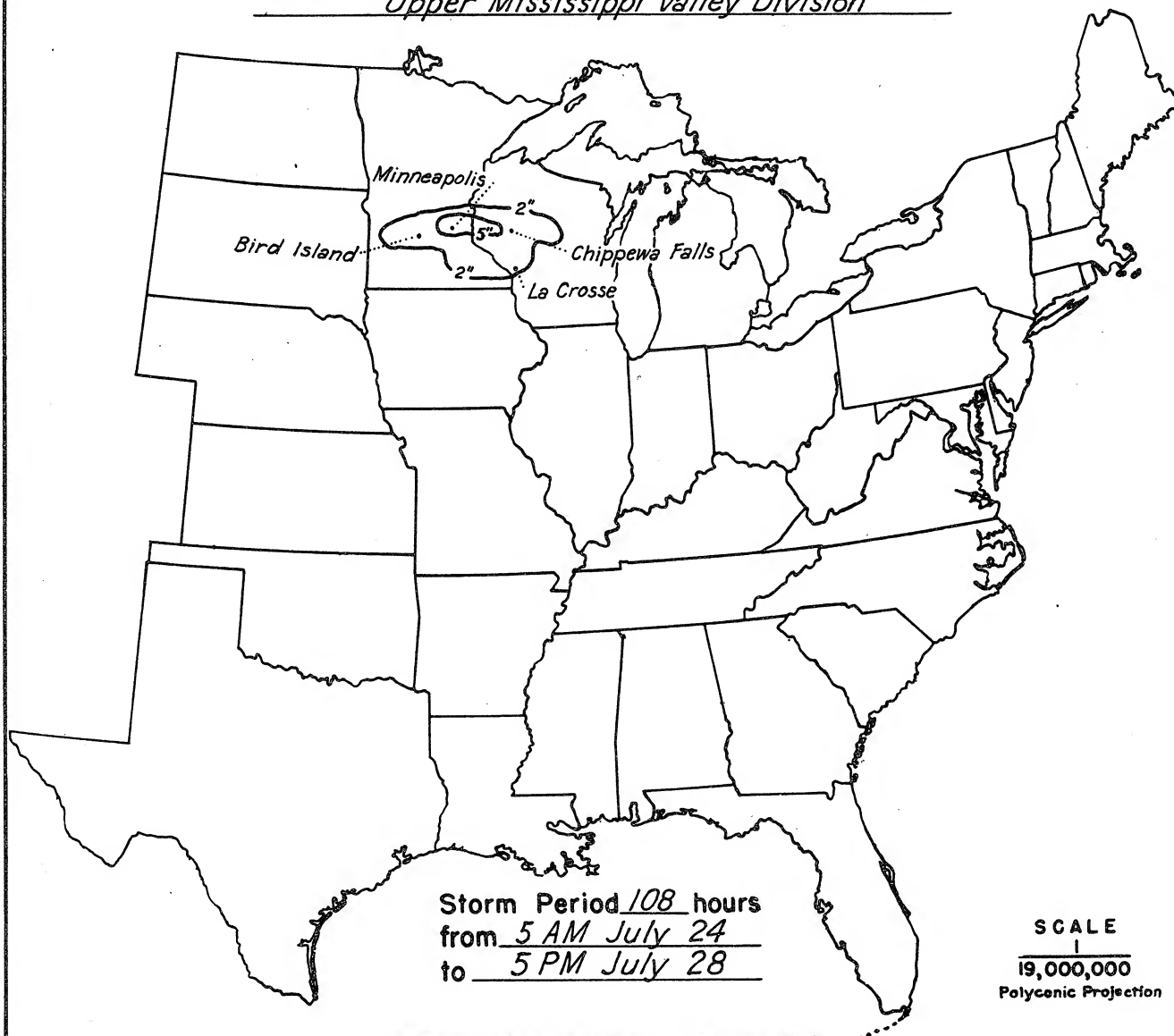
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

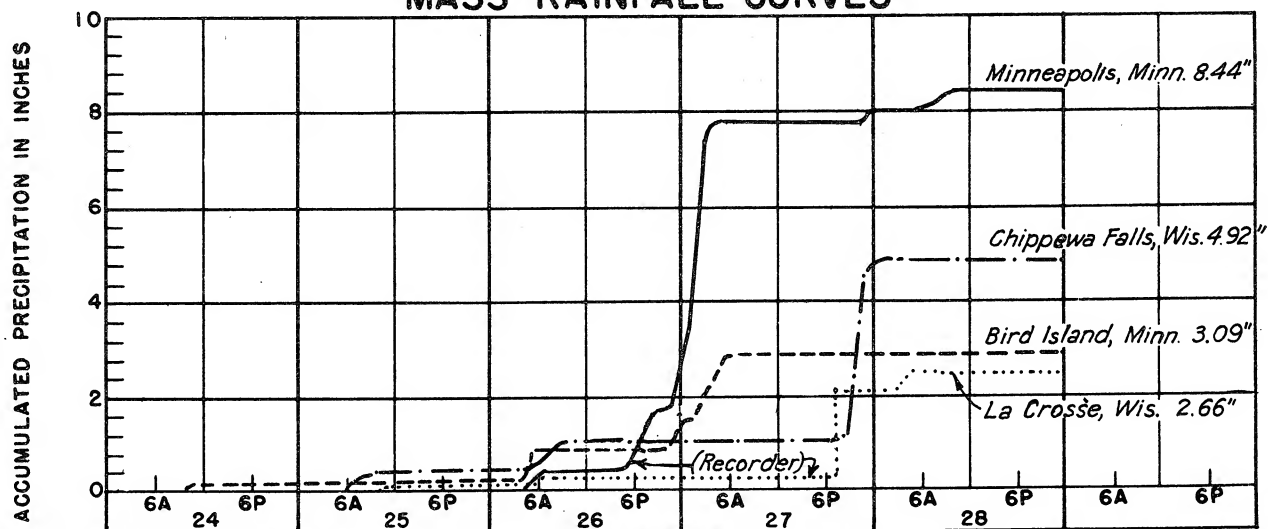
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	6.0	7.3	7.3	7.8	7.8	7.8	8.0	8.4	8.4	8.4	8.4
100	5.5	6.9	6.9	7.6	7.6	7.6	7.7	8.0	8.0	8.0	8.0
200	5.3	6.8	6.8	7.4	7.4	7.4	7.5	7.8	7.8	7.8	7.8
500	4.8	6.4	6.4	6.9	7.0	7.0	7.0	7.3	7.3	7.3	7.3
1,000	4.3	5.9	5.9	6.4	6.5	6.5	6.6	6.8	6.8	6.8	6.8
2,000	3.6	5.2	5.2	5.7	5.8	5.8	5.9	6.2	6.2	6.2	6.2
5,000	2.5	3.9	3.9	4.4	4.6	4.6	4.9	5.1	5.1	5.3	5.3
10,000	1.8	2.9	2.9	3.4	3.6	3.6	4.0	4.2	4.2	4.5	4.5
20,000	1.2	1.9	1.9	2.4	2.7	2.7	3.2	3.3	3.3	3.6	3.6

STORM STUDIES - ISOHYETAL MAP

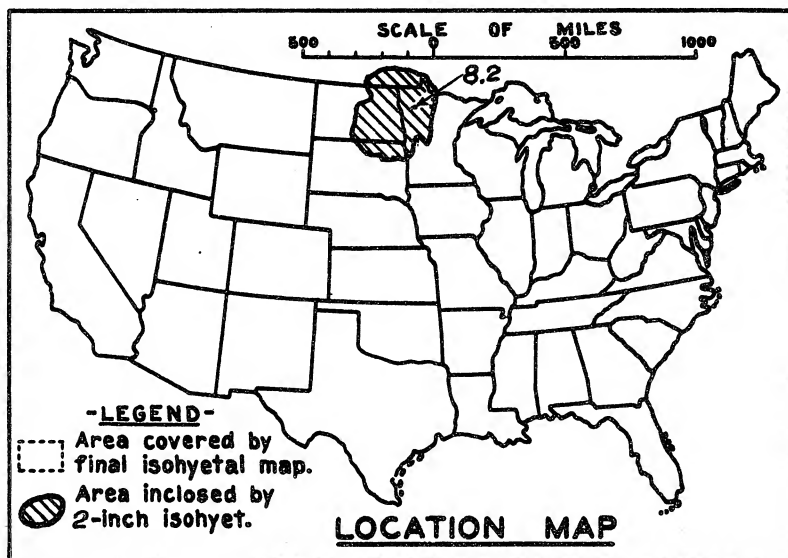
Storm of July 24-28, 1892 Assignment UMV I-1
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET



Storm of July 18 - 22, 1897

Assignment U. M. V. 1 - 2

Location Minn. and N. D.

Study Prepared by:

Upper Mississippi Valley

Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12-7-40

Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7-19-45

Remarks: Center at:

Lambert, Minn., and
Wild Rice, N. D.

DATA AND COMPUTATIONS COMPILED

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----4

Form 5001-B (24-hour " ")

Form 5001-D (" " " ") _____ 5

Misc. precip. records, meteorological data, etc.----- 6

Form 5002 (Mass rainfall curves)----- 13

PART II

Final isohyetal maps, in 1 sheet , scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 2

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 9

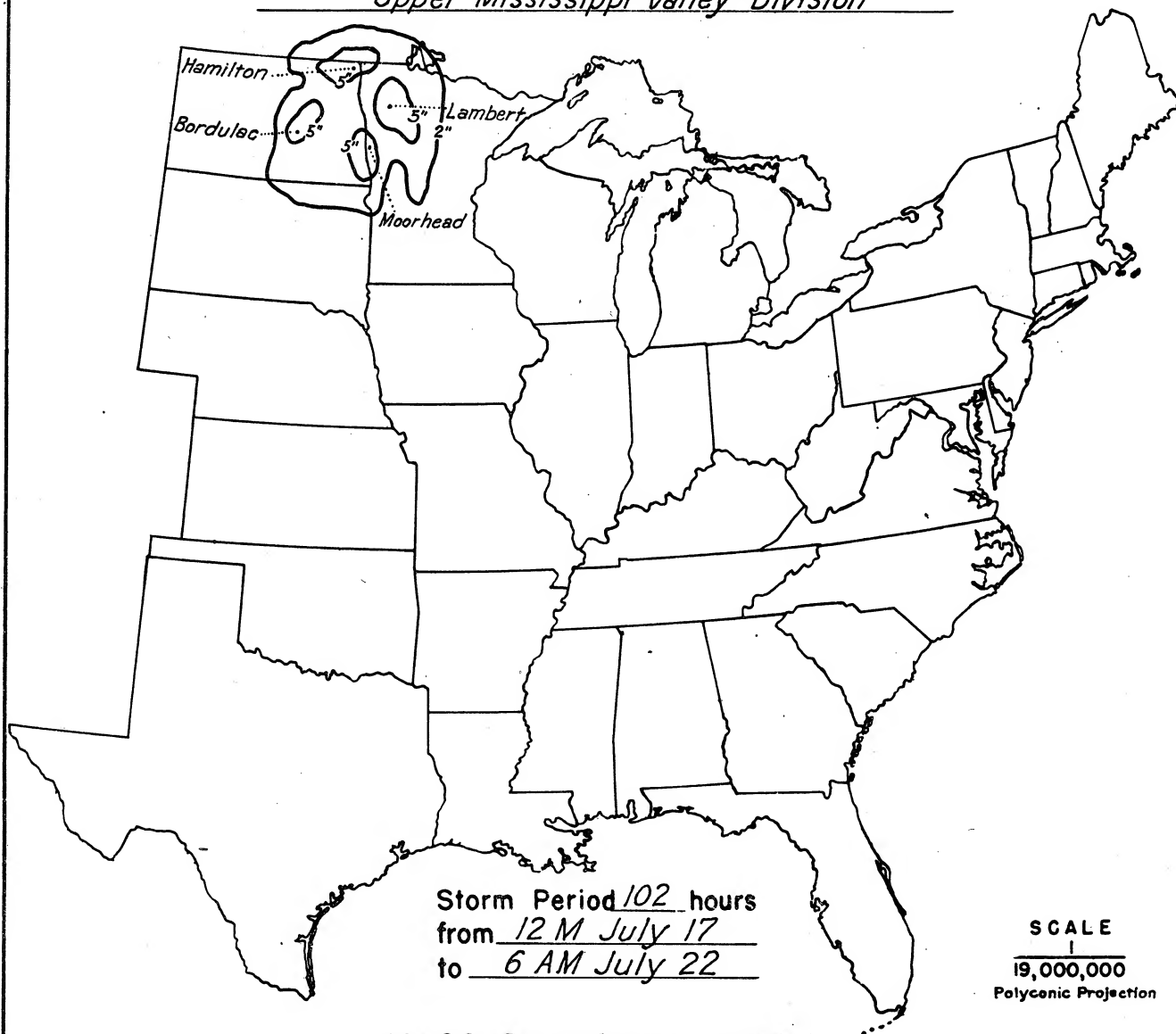
Maximum duration-depth-area curves_____ 1

Data relating to periods of maximum rainfall_____ 2

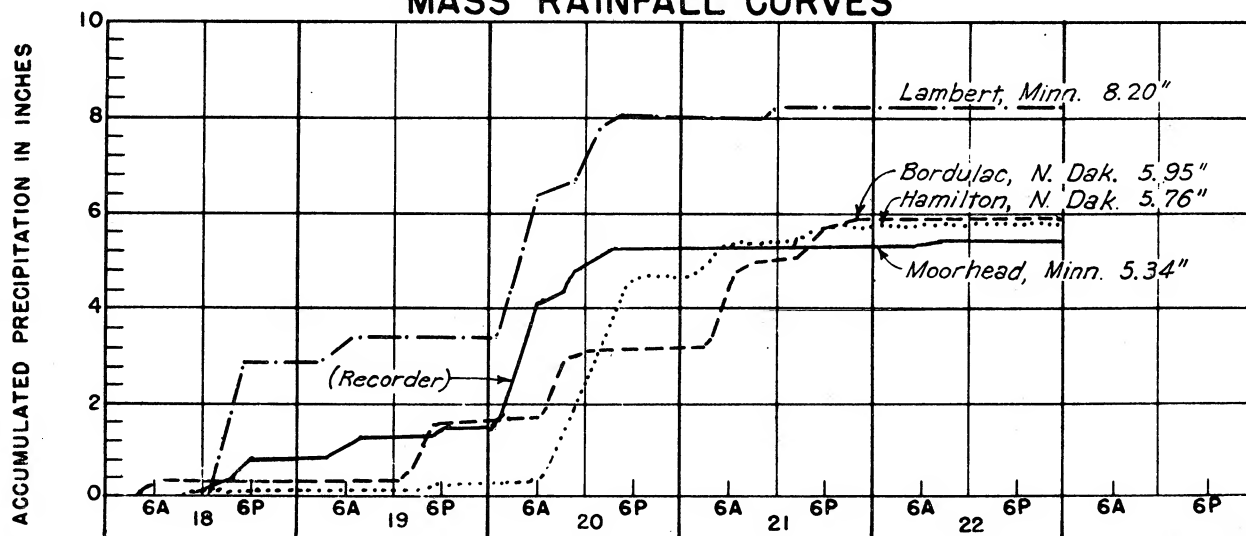
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

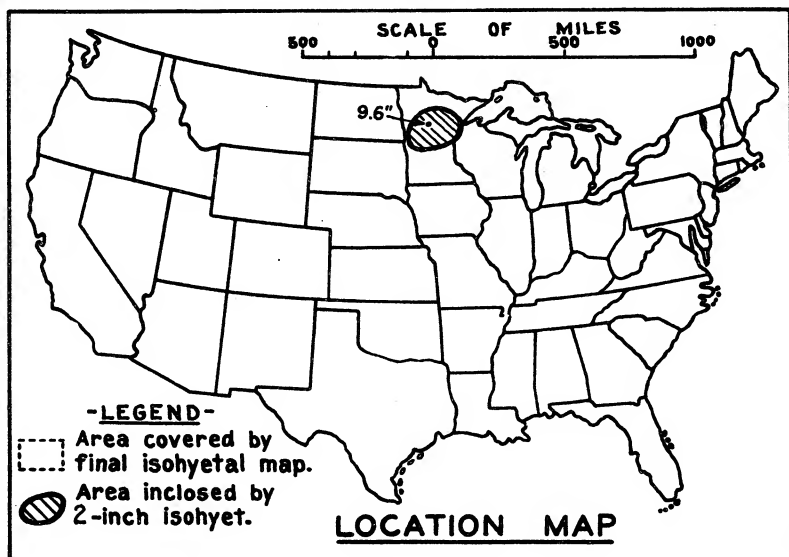
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	102
10	3.2	5.2	6.2	6.5	6.5	6.5	6.9	7.4	8.0	8.2	8.2
100	3.1	4.8	6.0	6.3	6.3	6.3	6.8	7.2	7.9	8.2	8.2
200	3.0	4.6	5.9	6.2	6.2	6.2	6.7	7.1	7.8	8.1	8.1
500	2.9	4.4	5.7	6.0	6.0	6.0	6.5	6.9	7.6	7.9	7.9
1,000	2.7	4.2	5.5	5.8	5.8	5.8	6.3	6.6	7.3	7.6	7.6
2,000	2.6	3.9	5.1	5.4	5.5	5.5	5.9	6.3	6.9	7.2	7.2
5,000	2.3	3.4	4.3	4.5	4.7	4.7	5.2	5.6	6.2	6.4	6.4
10,000	1.9	3.0	3.8	4.0	4.2	4.2	4.5	4.9	5.5	5.7	5.7
20,000	1.7	2.8	3.5	3.7	3.8	3.8	4.2	4.4	5.0	5.3	5.3
50,000	1.3	2.3	2.9	3.1	3.4	3.4	3.7	3.9	4.1	4.6	4.6
80,000	1.1	1.7	2.2	2.3	2.8	2.8	3.1	3.3	3.5	3.8	3.8

STORM STUDIES - ISOHYETAL MAP

Storm of July 18-22, 1897 Assignment UMV 1-2Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 2 - 6, 1898

Assignment U M V 1 - 3

Location Minn. & Wis.

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/20/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/12/43

Remarks: Center at

Pine River Dam, Minn.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	2
Miscl. precip. records, meteorological data, etc.-----	2
Form 5002 (Mass rainfall curves)-----	5

PART II

Final isohyetal maps, in 1 sheet, scale 1 ; 1,000,000

Data and computation sheets:

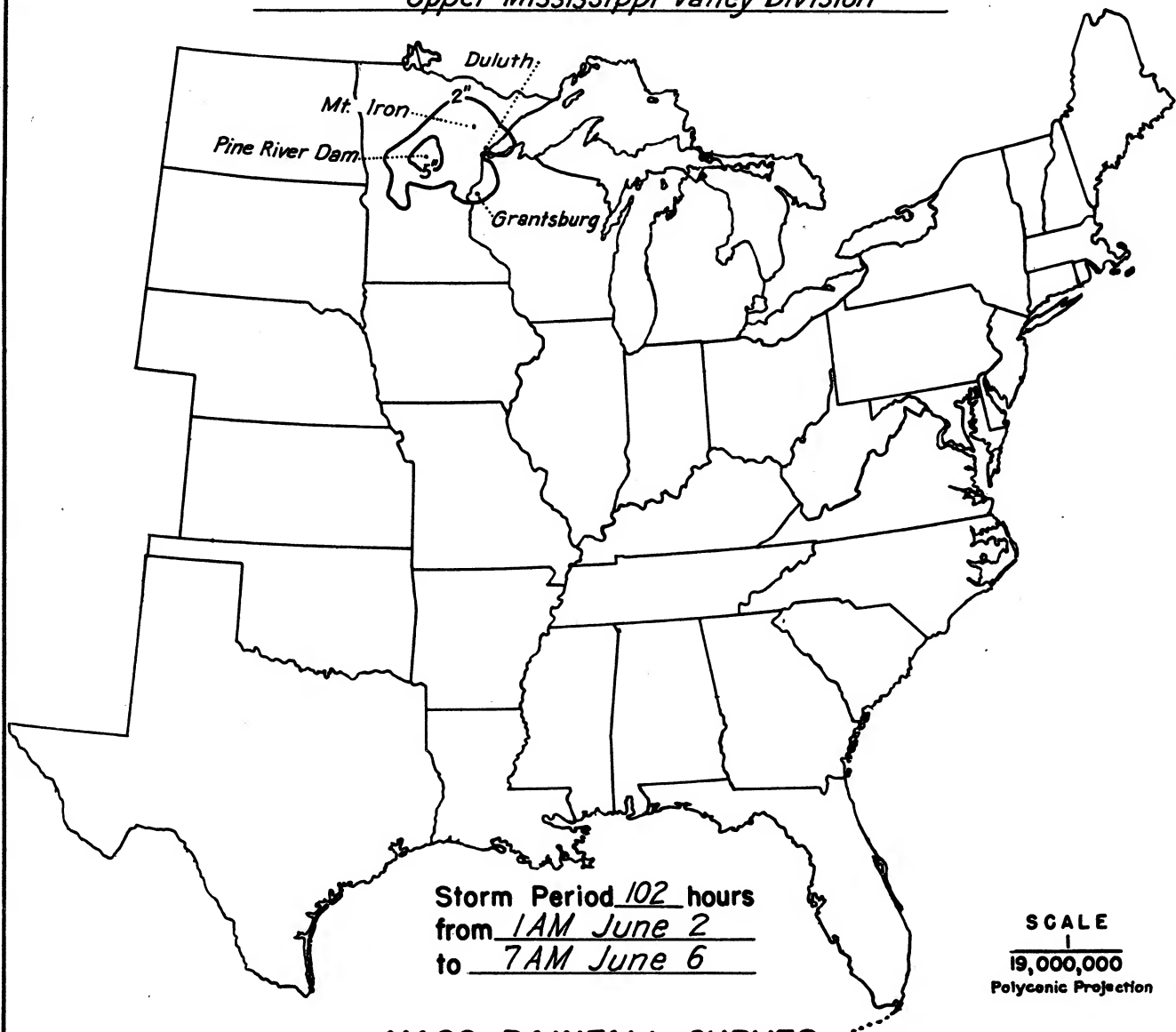
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

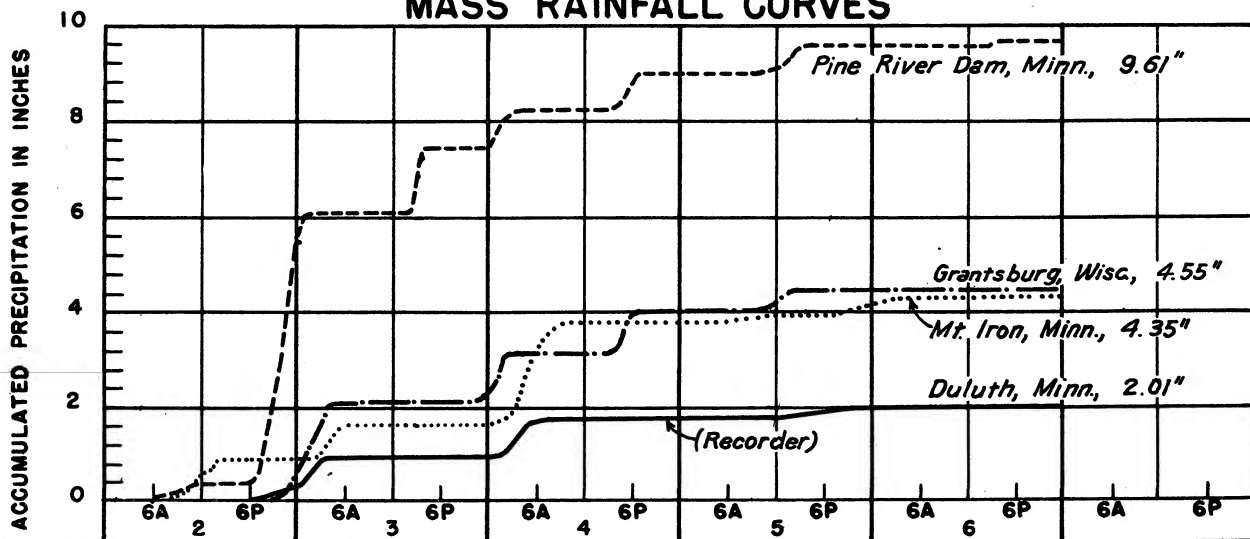
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	102
10	5.3	5.7	6.0	7.1	7.1	7.8	8.3	9.1	9.2	9.5	9.6
100	5.1	5.4	5.8	6.7	6.8	7.3	8.0	8.7	8.7	9.3	9.3
200	5.0	5.3	5.7	6.4	6.7	7.1	7.8	8.5	8.5	9.0	9.0
500	4.7	5.0	5.4	6.1	6.3	6.7	7.4	8.0	8.0	8.5	8.5
1,000	4.4	4.7	5.0	5.7	5.9	6.3	6.9	7.5	7.5	8.0	8.0
2,000	4.0	4.3	4.6	5.1	5.4	5.7	6.3	6.9	6.9	7.3	7.3
5,000	2.8	3.2	3.5	3.7	4.0	4.4	5.1	5.4	5.5	5.9	6.0
10,000	1.8	2.4	2.7	2.9	3.1	3.3	4.0	4.3	4.4	4.8	4.9
20,000	1.1	1.8	2.0	2.3	2.4	2.6	3.2	3.4	3.6	3.9	4.0
30,000	0.7	1.4	1.7	2.0	2.1	2.3	2.9	3.1	3.2	3.5	3.6

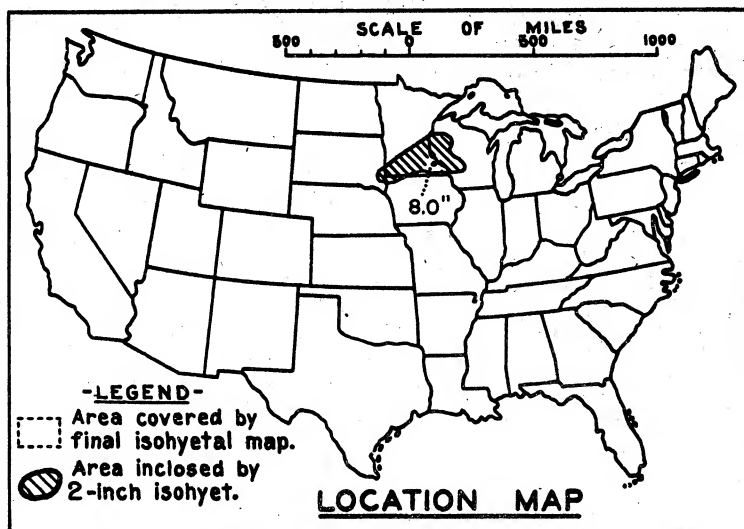
STORM STUDIES - ISOHYETAL MAP

Storm of June 2-6, 1898 Assignment UMV 1-3
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 11 - 13 June 1899

Assignment UMV 1-4 (A)

Location Minnesota - Wisconsin

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12/28/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/13/47

Remarks:

Center at
Minnesota City, Minnesota**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	8
Form 5001-B (24-hour " ")	-----	-
Form 5001-D (" " " ")	-----	10
Misc. precip. records, meteorological data, etc.	-----	10
Form 5002 (Mass rainfall curves)	-----	26

PART II

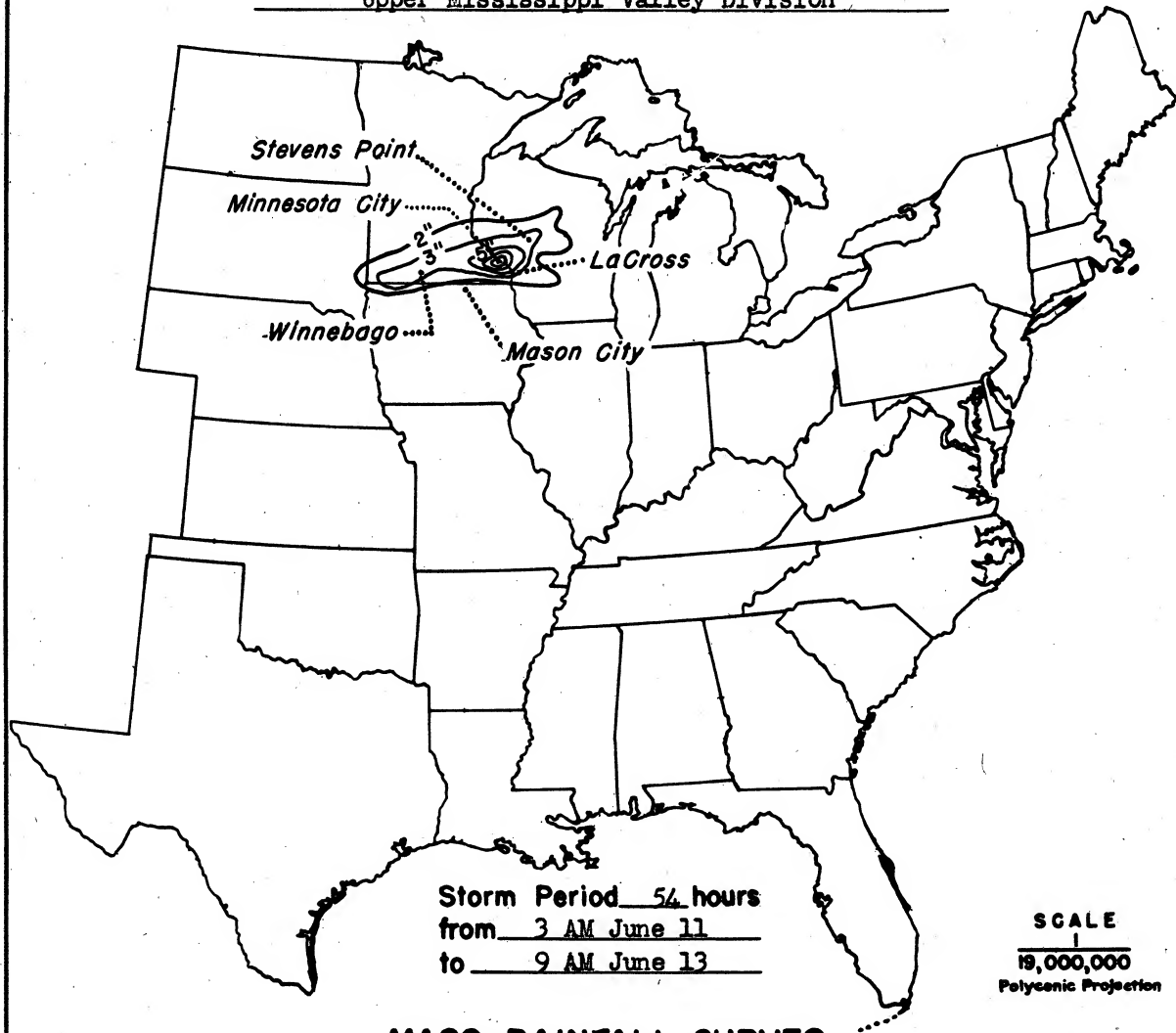
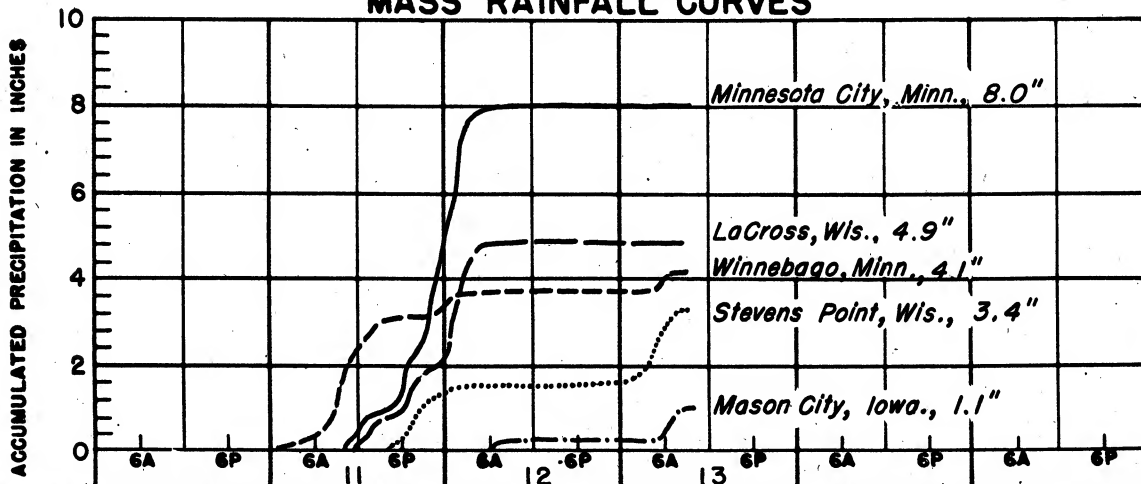
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

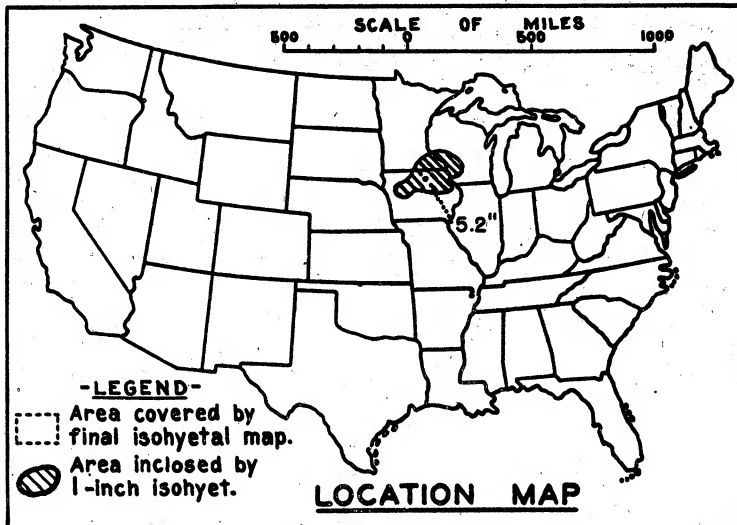
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)	-----	2
Form S-11 (Depth-area data from isohyetal map)	-----	1
Form S-12 (Maximum depth-duration data)	-----	6
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	54	
10	5.2	6.9	7.8	8.0	8.0	8.0	8.0	8.0	
100	5.1	6.6	7.5	7.8	7.8	7.8	7.8	7.8	
200	5.0	6.4	7.3	7.7	7.7	7.7	7.7	7.7	
500	4.6	6.0	6.9	7.3	7.3	7.3	7.3	7.3	
1,000	4.1	5.4	6.4	6.7	6.8	6.8	6.9	6.9	
2,000	3.3	4.7	5.7	6.0	6.1	6.1	6.3	6.3	
5,000	2.1	3.6	4.6	4.9	5.1	5.1	5.3	5.4	
10,000	1.5	2.7	3.5	4.0	4.2	4.2	4.5	4.7	
20,000	1.2	1.8	2.3	3.0	3.2	3.2	3.6	3.9	
32,000	1.0	1.3	1.7	2.1	2.5	2.5	3.0	3.3	

STORM STUDIES - ISOHYETAL MAPStorm of June 11-13, 1899Assignment UMV 1-4 AStudy Prepared by: St. Paul, Minn. DistrictUpper Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 13 - 14 June 1899

Assignment U M V 1-4 (B)

Location Iowa, Minn., Wisc.

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 12/28/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/13/47

Remarks:

Center at
Mason City, Iowa**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	8
Form 5001-B (24-hour " " " ").....	0
Form 5001-D (" " " " " ").....	10
Misc. precip. records, meteorological data, etc.....	10
Form 5002 (Mass rainfall curves).....	26

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

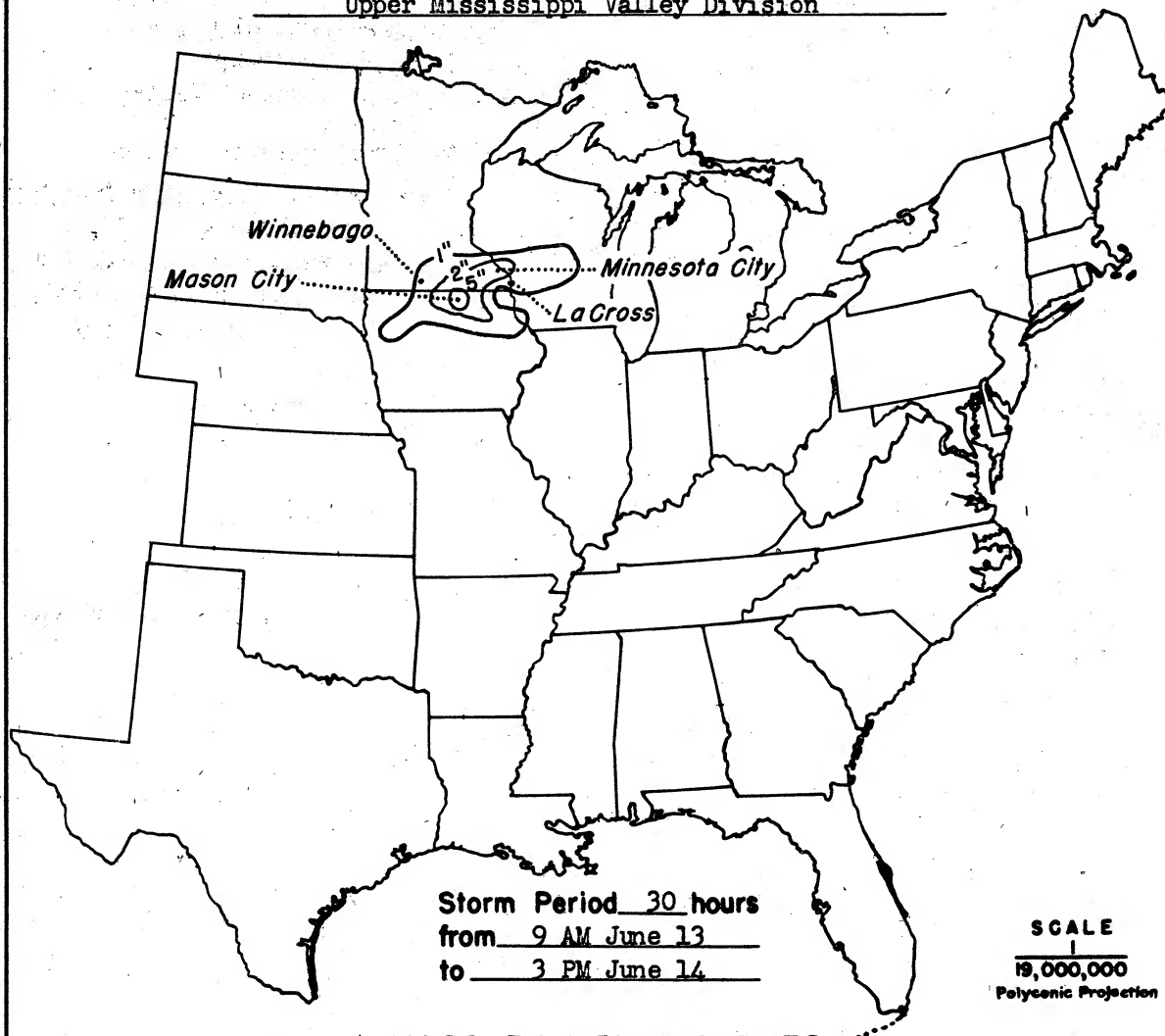
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	4
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	1

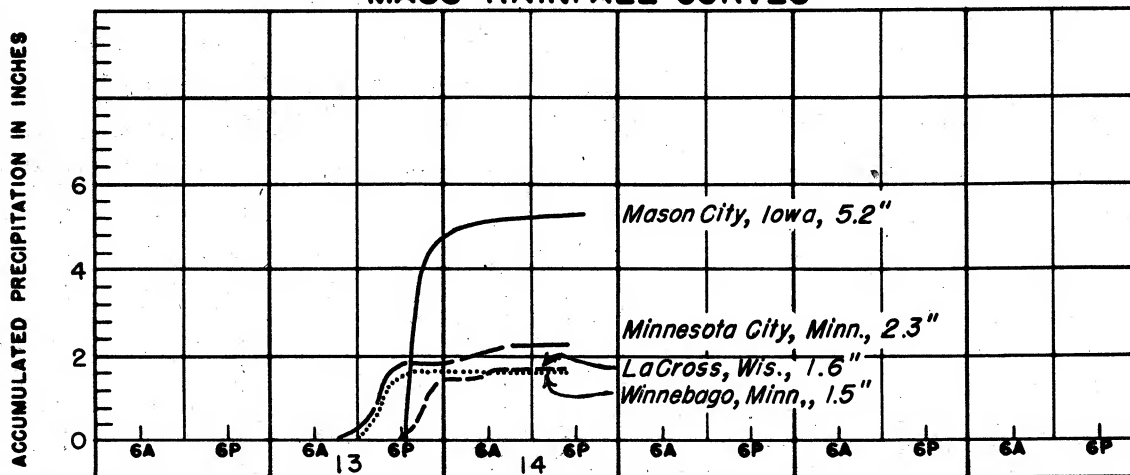
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

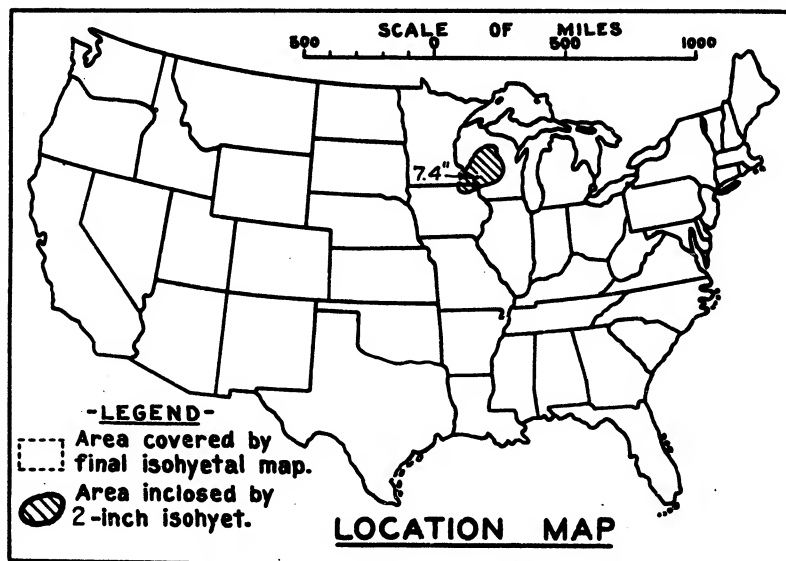
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30					
10	4.7	5.1	5.2	5.2	5.2					
100	4.0	4.9	5.0	5.1	5.1					
200	3.7	4.7	4.8	4.9	4.9					
500	3.3	4.4	4.5	4.6	4.6					
1,000	2.9	4.1	4.2	4.3	4.3					
2,000	2.5	3.6	3.7	3.8	3.8					
5,000	1.8	2.9	3.0	3.1	3.1					
10,000	1.3	2.2	2.3	2.5	2.5					
20,000	1.0	1.6	1.8	2.0	2.0					
30,000	0.9	1.4	1.6	1.8	1.8					

STORM STUDIES - ISOHYETAL MAP

Storm of June 13-14, 1899 Assignment IMV 1-4 BStudy Prepared by: St. Paul, Minn. DistrictUpper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 27 - 30, 1900

Assignment U M V 1 - 7 (A)

Location Wis. and Minn.

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2/6/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/28/45

Remarks: Center at:

La Crosse, Wisconsin

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 7
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 9
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 20

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

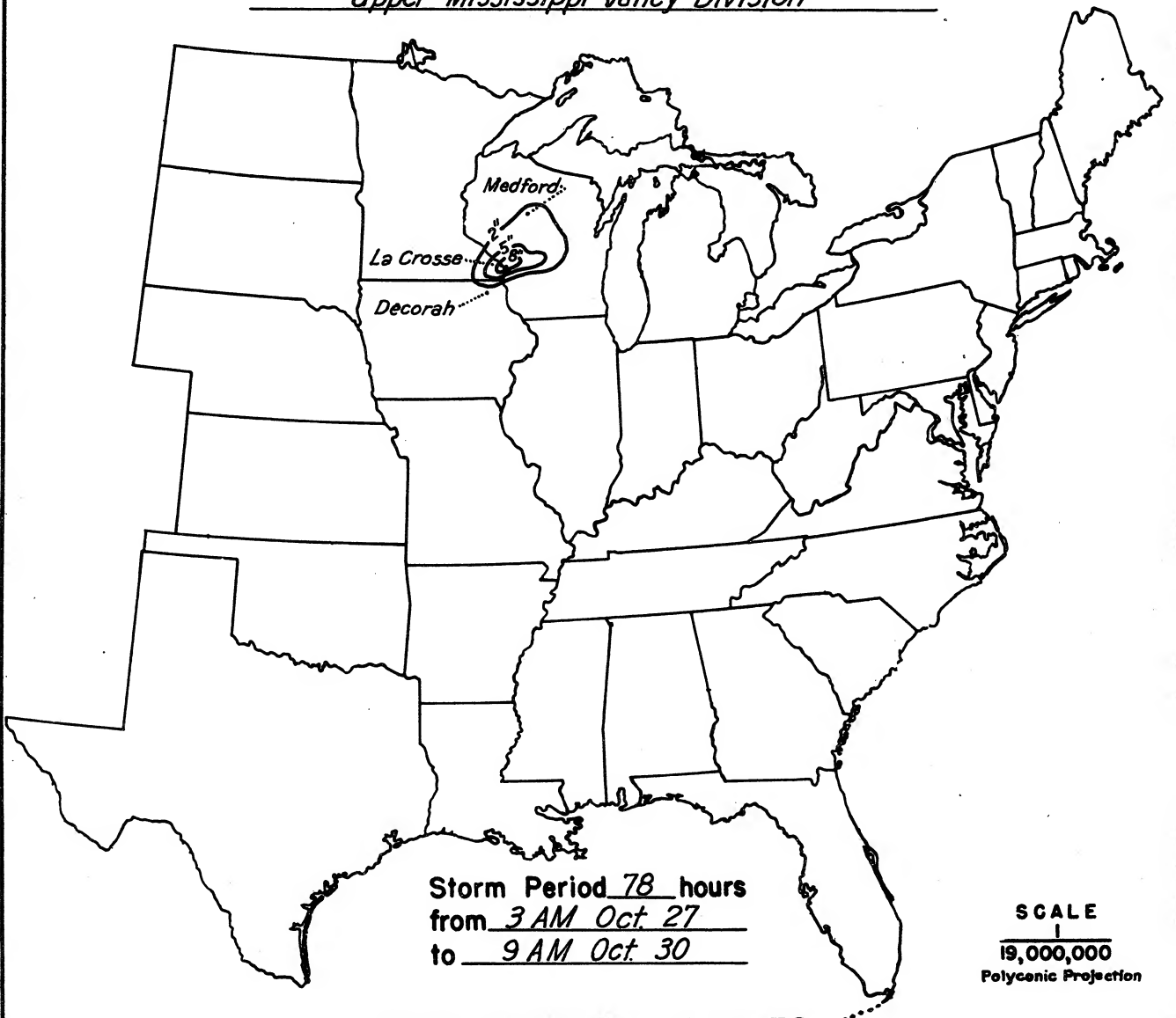
Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 3
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

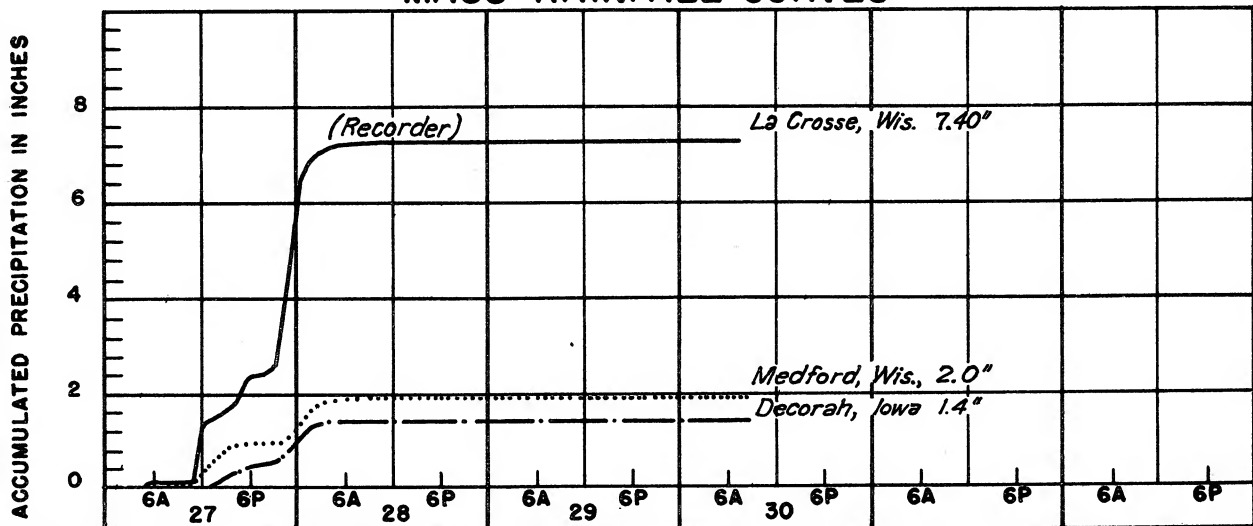
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	78
10*	5.0	6.0	7.8	8.0	8.1	8.1	8.1	8.1	8.2	8.2*
50	4.8	5.8	7.6	7.8	7.9	7.9	7.9	7.9	8.0	8.0
100	4.7	5.6	7.5	7.7	7.8	7.8	7.8	7.8	7.9	7.9
200	4.6	5.5	7.3	7.6	7.7	7.7	7.7	7.7	7.8	7.8
500	4.3	5.1	6.7	7.2	7.3	7.3	7.3	7.3	7.4	7.4
1,000	3.9	4.6	6.1	6.7	6.8	6.8	6.8	6.8	6.9	6.9
2,000	3.3	4.1	5.3	5.9	6.0	6.1	6.1	6.1	6.2	6.2
5,000	2.5	3.3	4.2	4.8	4.9	5.0	5.0	5.0	5.1	5.2
10,000	2.0	2.6	3.3	3.8	3.9	4.0	4.0	4.0	4.1	4.2
15,200	1.7	2.1	2.8	3.2	3.3	3.4	3.4	3.4	3.5	3.6
* Extrapolated										

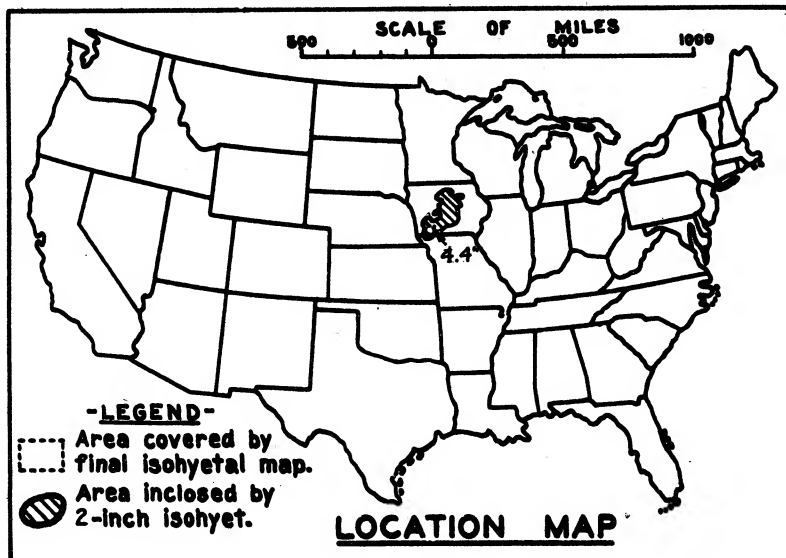
STORM STUDIES - ISOHYETAL MAP

Storm of October 27-30, 1900 Assignment UMV 1-7 (A)
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Oct. 30 - Nov. 1, 1900

Assignment U M V 1 - 7 (B)

Location Iowa

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2/6/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/28/45

Remarks: Center at :

Lenox, Iowa

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 7
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 9
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 20

PART II

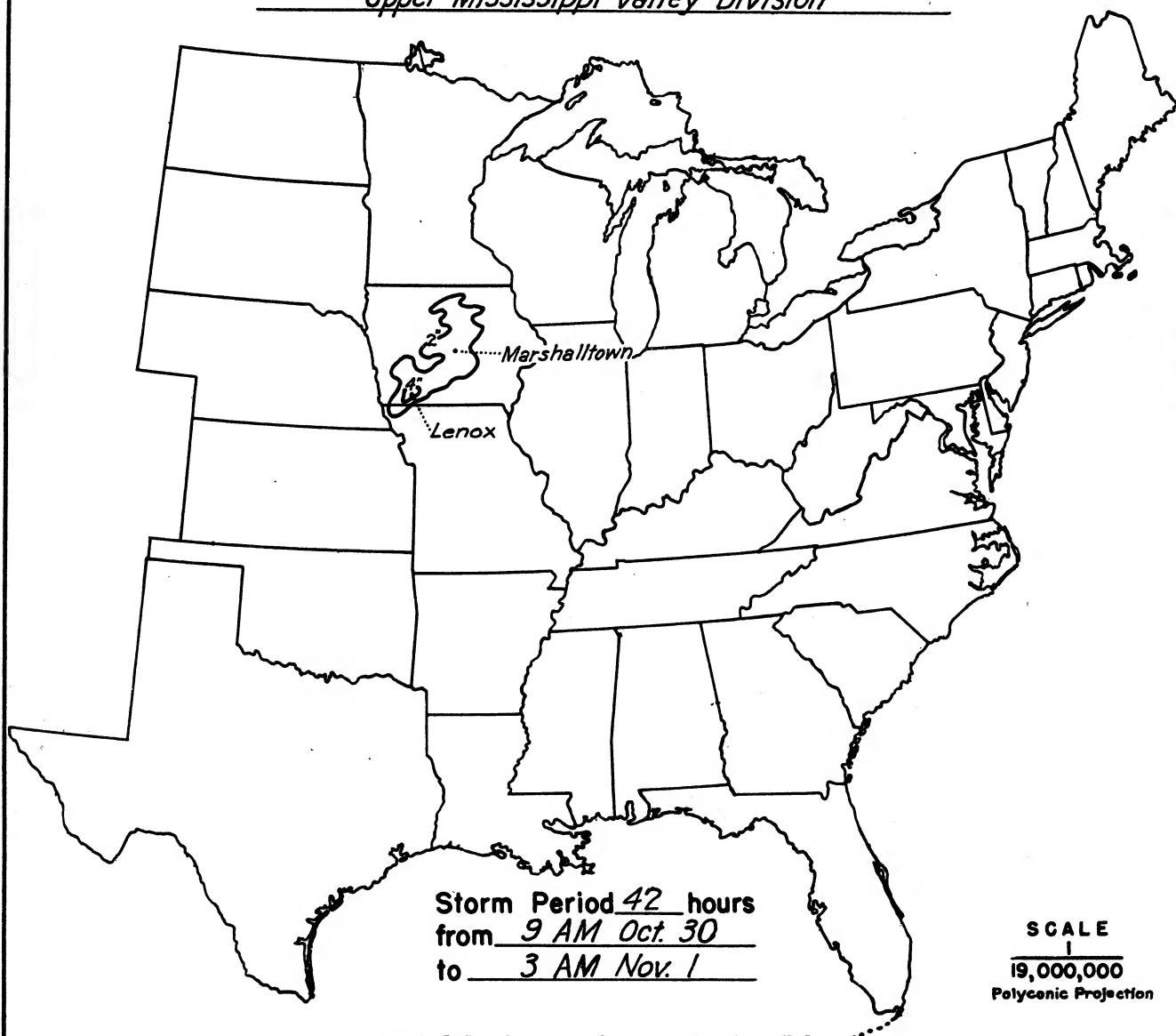
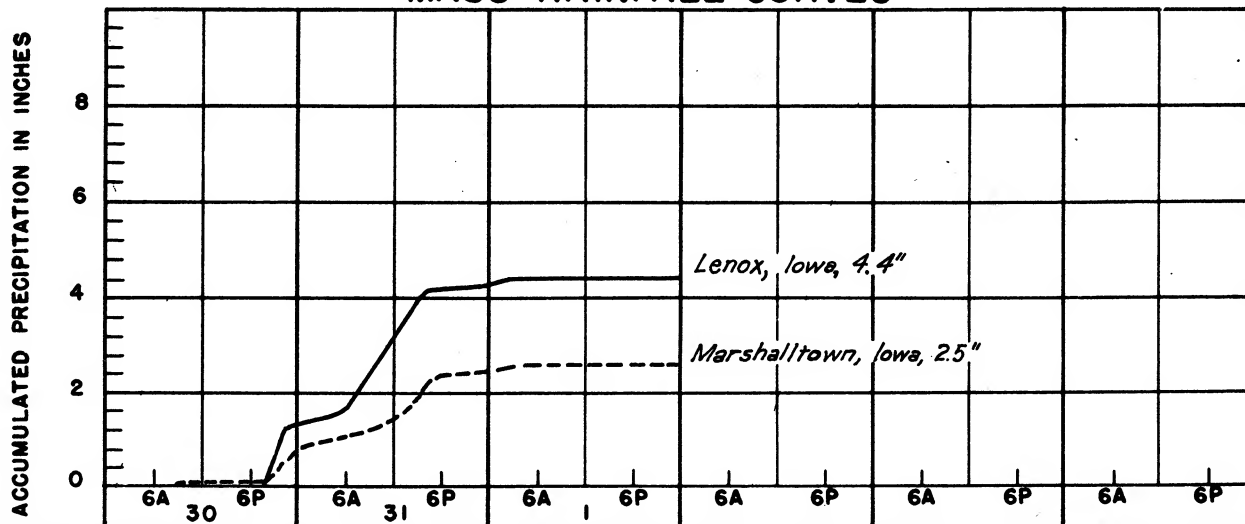
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

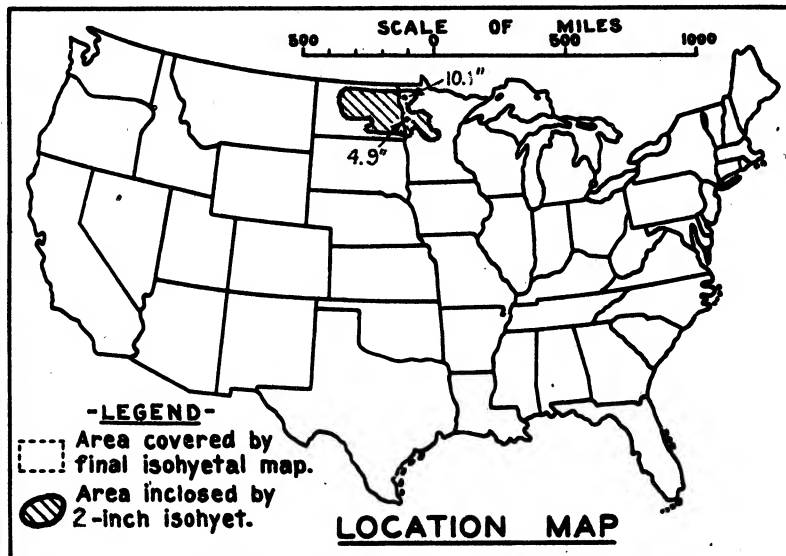
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 2
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	42					
10	1.6	2.6	3.6	4.2	4.3	4.4	4.4					
50	1.5	2.5	3.3	4.1	4.2	4.3	4.4					
100	1.5	2.5	3.2	4.0	4.2	4.3	4.4					
200	1.4	2.4	3.1	3.9	4.1	4.2	4.3					
500	1.2	2.2	2.8	3.7	3.9	4.0	4.1					
1,000	1.1	2.0	2.6	3.5	3.7	3.8	3.9					
2,000	1.0	1.7	2.4	3.2	3.3	3.4	3.6					
5,000	0.8	1.4	1.9	2.5	2.7	2.9	3.0					
10,000	0.7	1.2	1.7	2.2	2.4	2.6	2.7					
13,400	0.7	1.2	1.7	2.1	2.4	2.5	2.6					

STORM STUDIES - ISOHYETAL MAPStorm of October 30 - November 1, 1900 Assignment UMV 1-7(B)Study Prepared by: St. Paul, Minn. DistrictUpper Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 1 - 6, 1901

Assignment U M V 1 - 8

Location Minn. - N. D.

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6-20-40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/24/45

Remarks: Center at:

New Folden and Moorhead,
Minn.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 3

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 3

Misc. precip. records, meteorological data, etc.----- 4

Form 5002 (Mass rainfall curves)----- 9

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 2

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 7

Maximum duration-depth-area curves----- 1

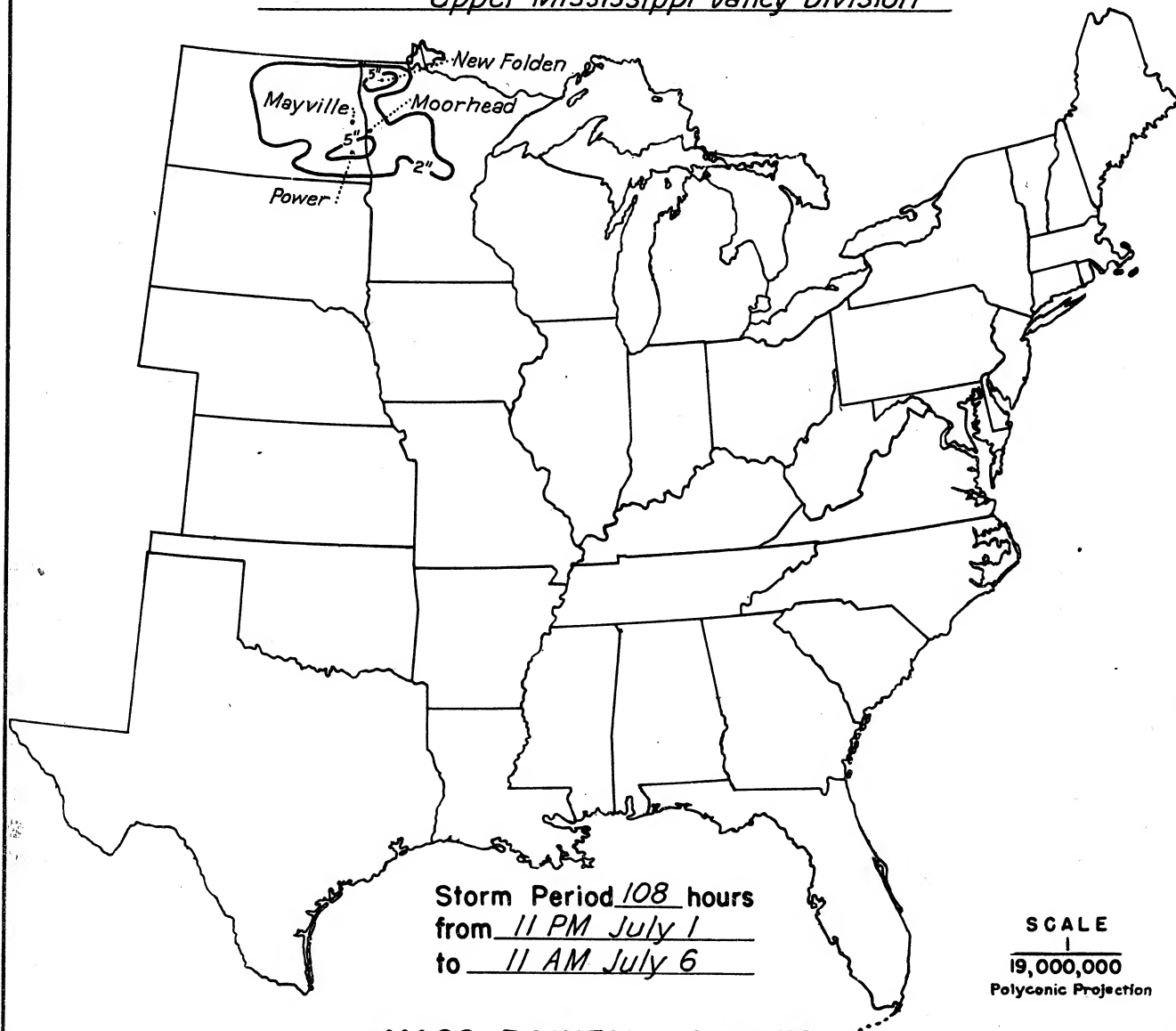
Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

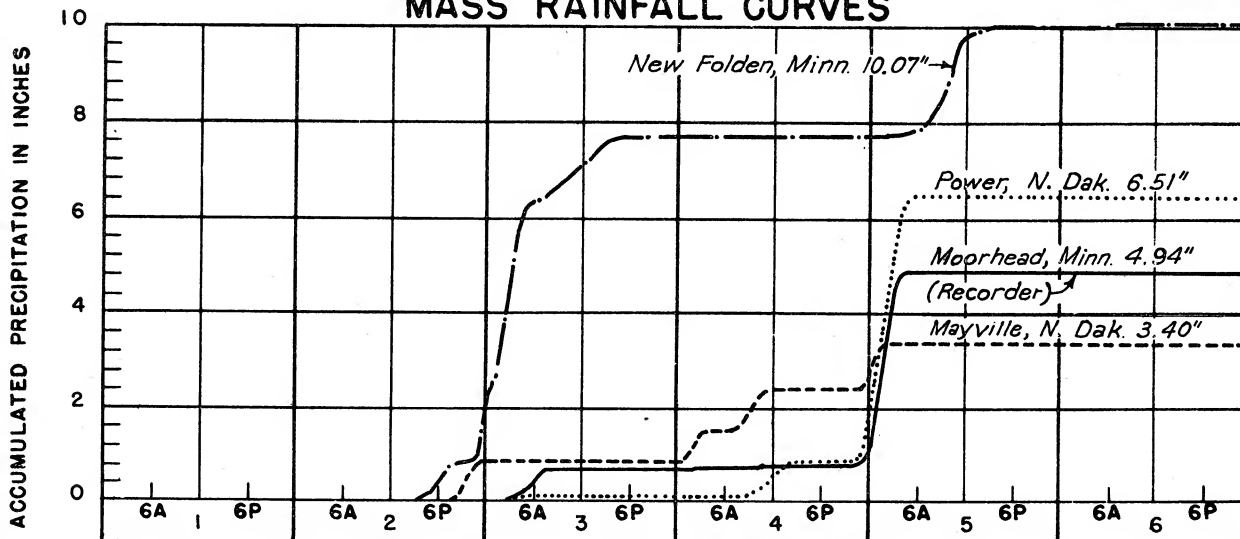
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	5.5	5.9	6.8	7.6	7.7	7.7	7.7	8.8	10.0	10.1	10.1
100	5.4	5.8	6.6	7.4	7.6	7.6	7.6	8.6	9.7	10.0	10.0
200	5.3	5.7	6.5	7.2	7.4	7.4	7.4	8.5	9.5	9.8	9.8
500	5.0	5.4	6.0	6.7	7.0	7.0	7.0	8.0	8.9	9.2	9.2
1,000	4.7	5.0	5.5	6.1	6.4	6.4	6.4	7.3	8.1	8.3	8.3
2,000	4.2	4.5	4.8	5.3	5.5	5.5	5.6	6.3	6.9	7.1	7.1
5,000	3.2	3.6	3.7	4.1	4.2	4.2	4.5	4.6	4.9	5.0	5.0
10,000	2.2	2.6	2.7	3.2	3.3	3.3	3.6	3.9	4.1	4.1	4.1
20,000	1.4	1.7	1.8	2.4	2.6	2.6	2.8	3.5	3.7	3.7	3.7
50,000	1.0	1.2	1.3	1.7	2.0	2.0	2.2	2.8	3.1	3.1	3.1

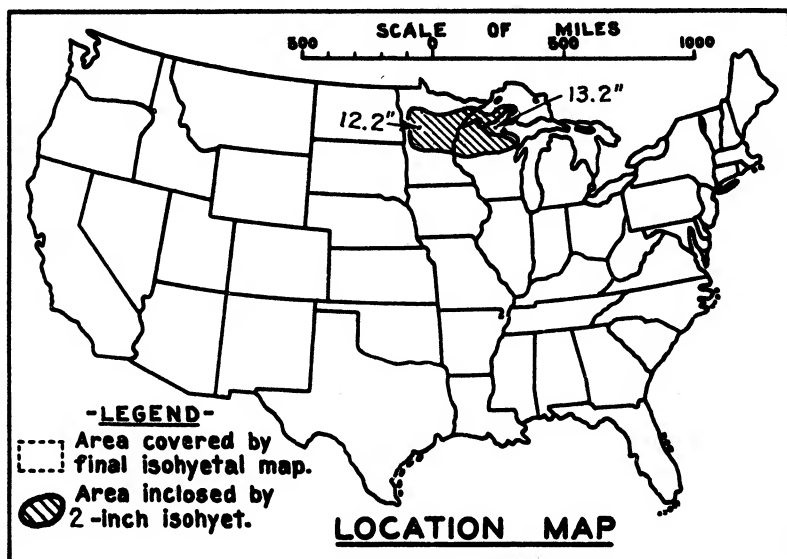
STORM STUDIES - ISOHYETAL MAP

Storm of July 1-6, 1901 Assignment UMV 1-8
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 18 - 23, 1909

Assignment U M V 1 - 11

Location Northern Minn. & Wis.

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/7/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/24/41Remarks: TOTAL STORM AREA
Centers at ; Ironwood, Mich.
and Beaulieu, Minn.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	4
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	8
Miscl. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	24

PART II

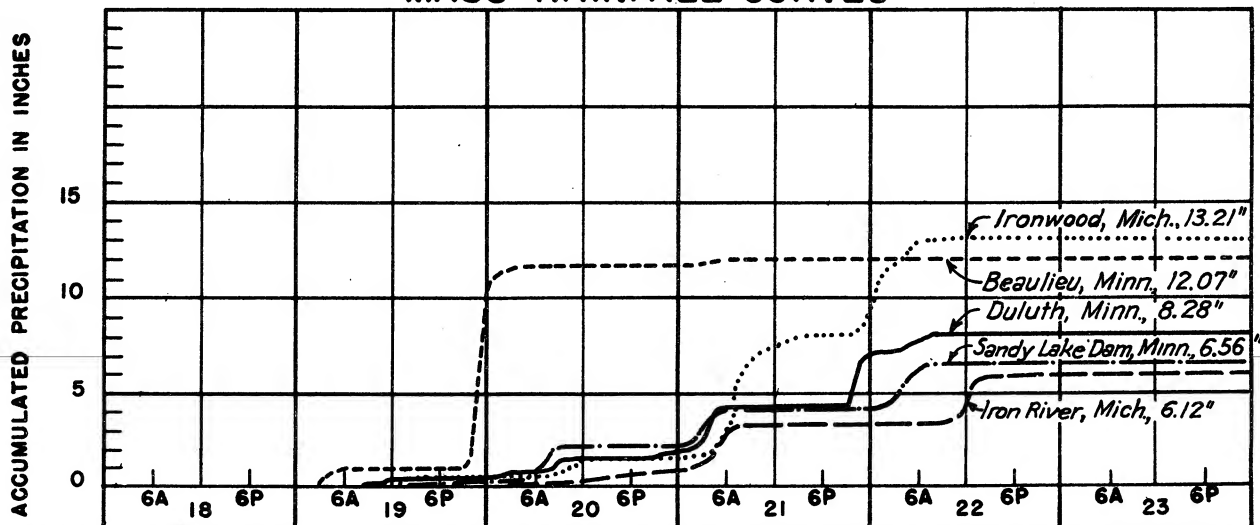
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

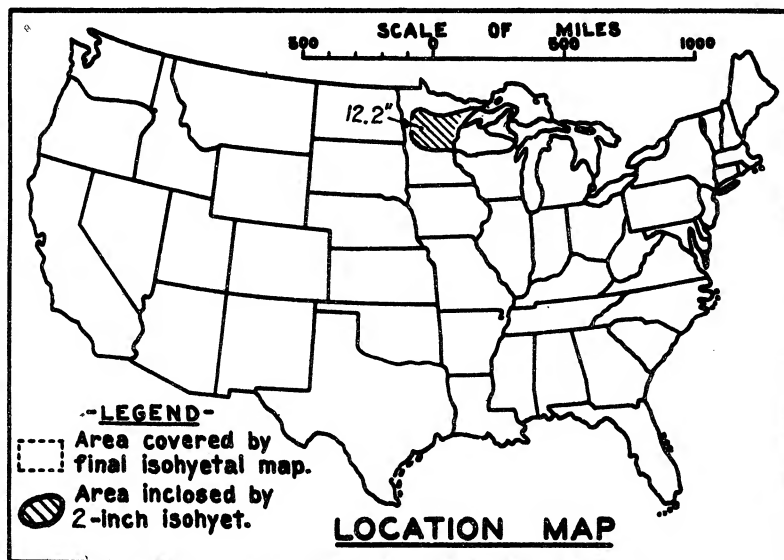
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	10.5	10.7	10.8	11.5	11.7	11.8	12.1	12.8	13.2	13.2	13.2
100	10.3	10.5	10.7	11.3	11.5	11.6	11.8	12.5	13.0	13.0	13.0
200	10.1	10.4	10.5	11.1	11.3	11.5	11.6	12.1	12.5	12.5	12.5
500	9.7	10.1	10.2	10.6	11.0	11.2	11.2	11.5	11.6	11.6	11.6
1,000	9.2	9.6	9.7	10.0	10.4	10.6	10.6	10.8	10.9	10.9	10.9
2,000	7.9	8.5	8.6	8.8	9.3	9.5	9.5	9.9	10.0	10.0	10.0
5,000	4.3	5.4	5.5	6.1	7.1	7.3	7.5	8.5	8.9	8.9	8.9
10,000	2.1	3.2	3.4	4.2	5.5	5.6	6.0	7.4	7.8	8.0	8.0
20,000	1.5	2.1	2.4	2.7	4.2	4.4	4.8	6.1	6.5	6.7	6.7
50,000	1.3	1.6	1.8	2.0	2.5	3.0	3.4	4.2	4.5	4.8	4.8

STORM STUDIES - ISOHYETAL MAPStorm of July 18-23, 1909 Assignment UMV 1-11Study Prepared by: St. Paul, Minn. DistrictUpper Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 18 - 23, 1909
 Assignment U M V 1 - 11 (a)
 Location Northern Minn. & Wis.
 Study Prepared by:

Upper Mississippi Valley
 Division

St. Paul District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/7/39
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/24/41

Remarks: Rainfall data only
 FOR BEAULIEU, MINN. CENTER

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	4
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	8
Misc. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	24

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

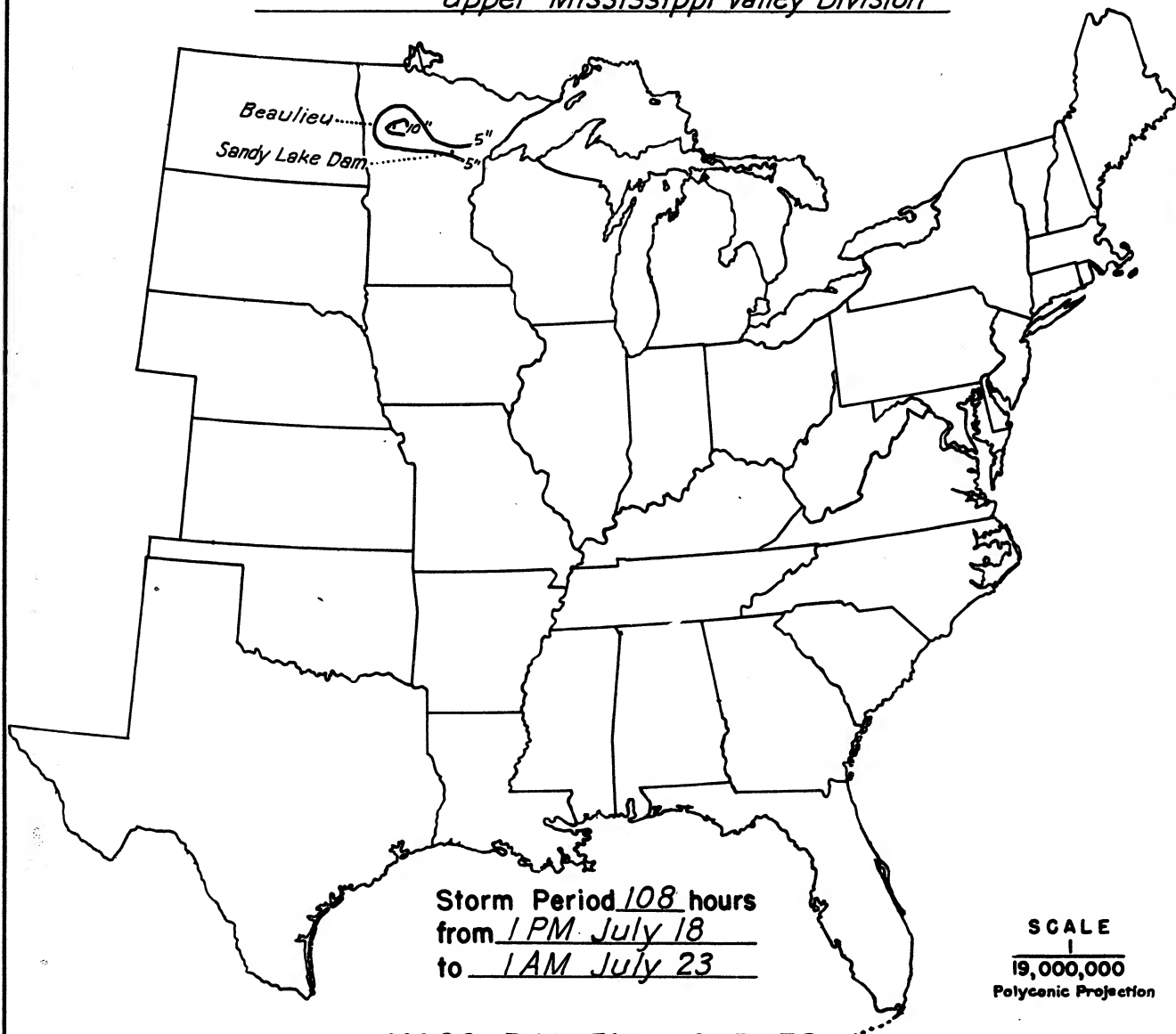
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

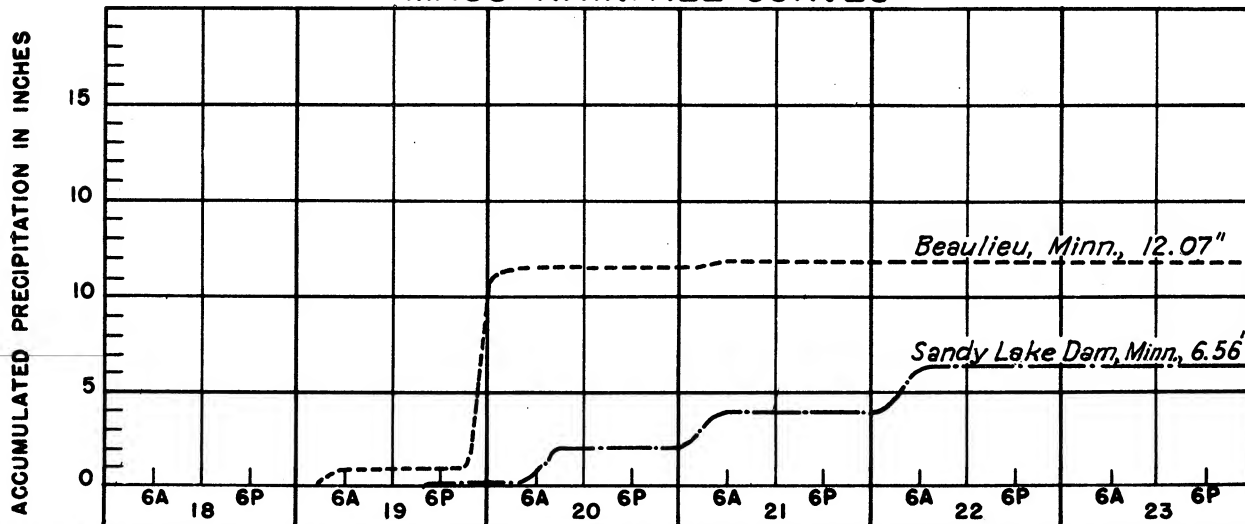
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	10.5	10.7	10.8	11.5	11.7	11.8	11.8	12.0	12.1	12.1	12.1
100	10.3	10.5	10.7	11.3	11.5	11.6	11.6	12.0	12.0	12.0	12.0
200	10.1	10.4	10.5	11.1	11.3	11.5	11.5	11.8	11.8	11.8	11.8
500	9.7	10.1	10.2	10.6	10.9	11.2	11.2	11.4	11.5	11.5	11.5
1,000	9.2	9.6	9.7	10.0	10.4	10.6	10.6	10.8	10.9	10.9	10.9
2,000	7.9	8.5	8.6	8.8	9.3	9.4	9.5	9.9	10.0	10.0	10.0
5,000	4.3	5.4	5.5	5.6	6.1	6.5	6.8	7.5	7.6	7.7	7.7

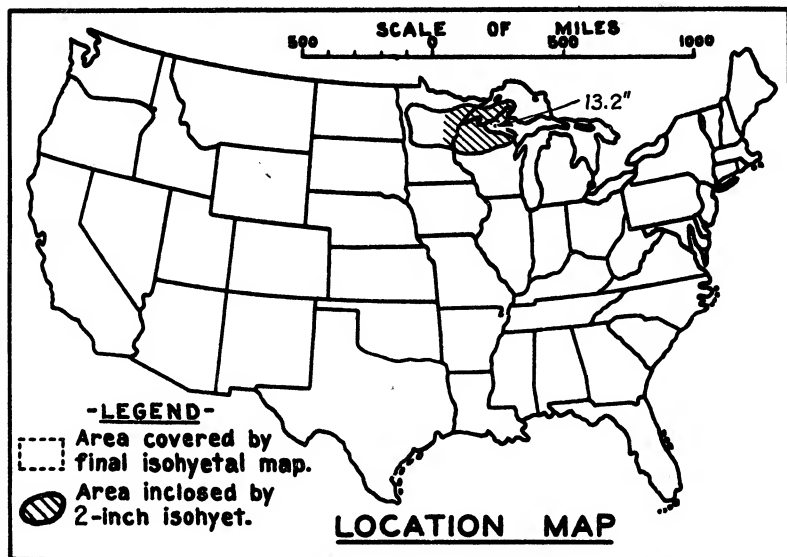
STORM STUDIES - ISOHYETAL MAP

Storm of July 18-23, 1909 Assignment UMV 1-11 (a)
Study Prepared by: St. Paul Minn. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 18 - 23, 1909
 Assignment U M V 1 - 11 (b)
 Location Northern Minn. & Wis.
 Study Prepared by:

Upper Mississippi Valley
 Division

St. Paul District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/7/39
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/24/41

Remarks: Rainfall Data only
 FOR IRONWOOD, MICH. CENTER

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	4
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	8
Miscl. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	24

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

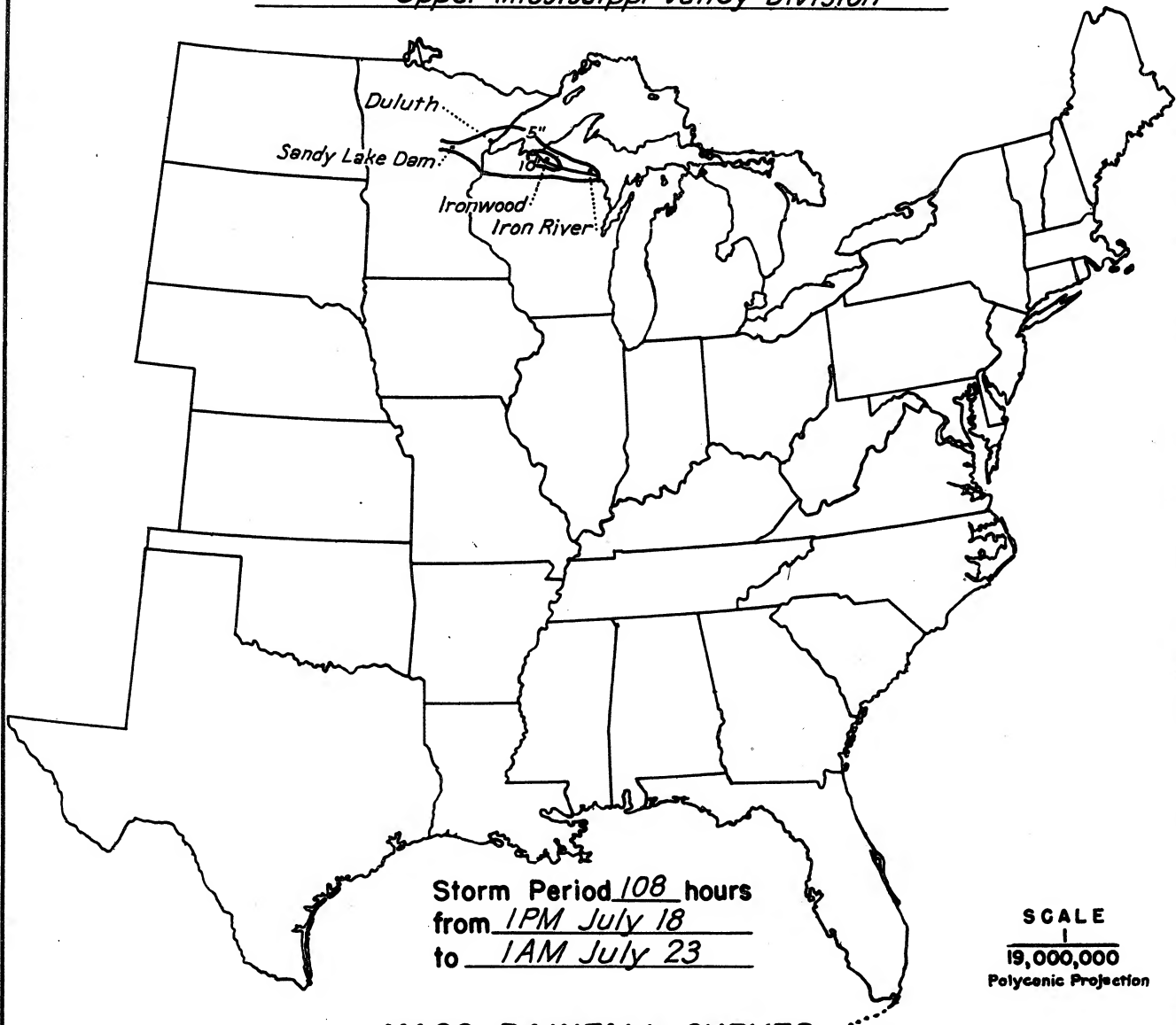
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

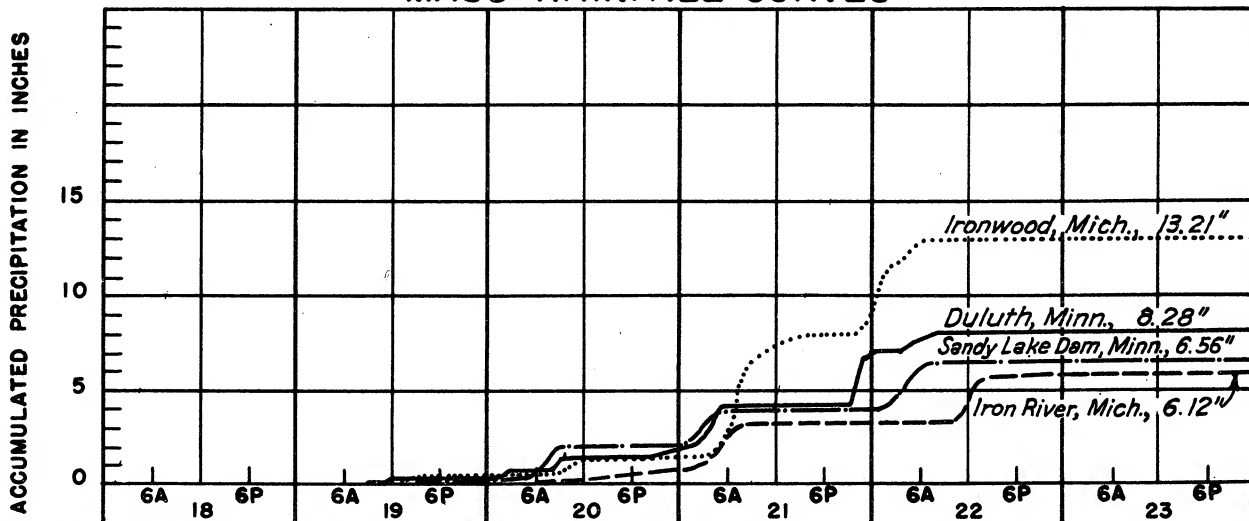
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	5.2	6.3	6.7	9.6	11.1	11.7	12.1	12.8	13.2	13.2	13.2
100	4.9	6.2	6.6	9.4	10.8	11.4	11.8	12.5	12.9	12.9	12.9
200	4.6	6.0	6.3	9.0	10.5	11.1	11.5	12.1	12.5	12.5	12.5
500	3.9	5.5	5.8	7.9	9.8	10.1	10.7	11.2	11.5	11.5	11.5
1,000	3.2	5.0	5.3	6.9	9.0	9.3	9.7	10.3	10.5	10.5	10.5
2,000	2.8	4.4	4.6	6.0	7.9	8.2	8.7	9.2	9.5	9.5	9.5
5,000	2.3	3.6	3.8	5.0	6.5	6.8	7.2	7.8	8.0	8.0	8.0
10,000	2.1	3.2	3.4	4.2	5.4	5.6	6.0	6.5	6.7	6.9	6.9

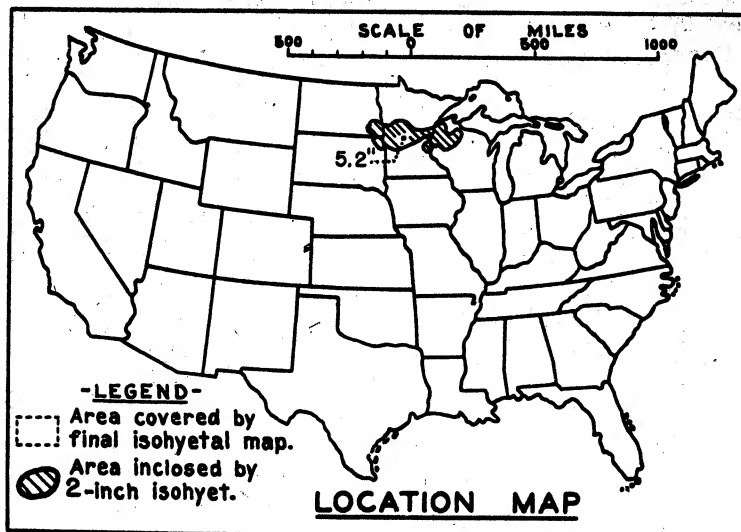
STORM STUDIES - ISOHYETAL MAP

Storm of July 18-23, 1909 Assignment UMV 1-11 (b)
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 16-21 Aug. 1913

Assignment U M V 1 - 14 (A)

Location Minnesota - Iowa

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2/10/41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/26/47

Remarks:

Center at
New London, Minnesota**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	6
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	8
Form 5002 (Mass rainfall curves)-----	17

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

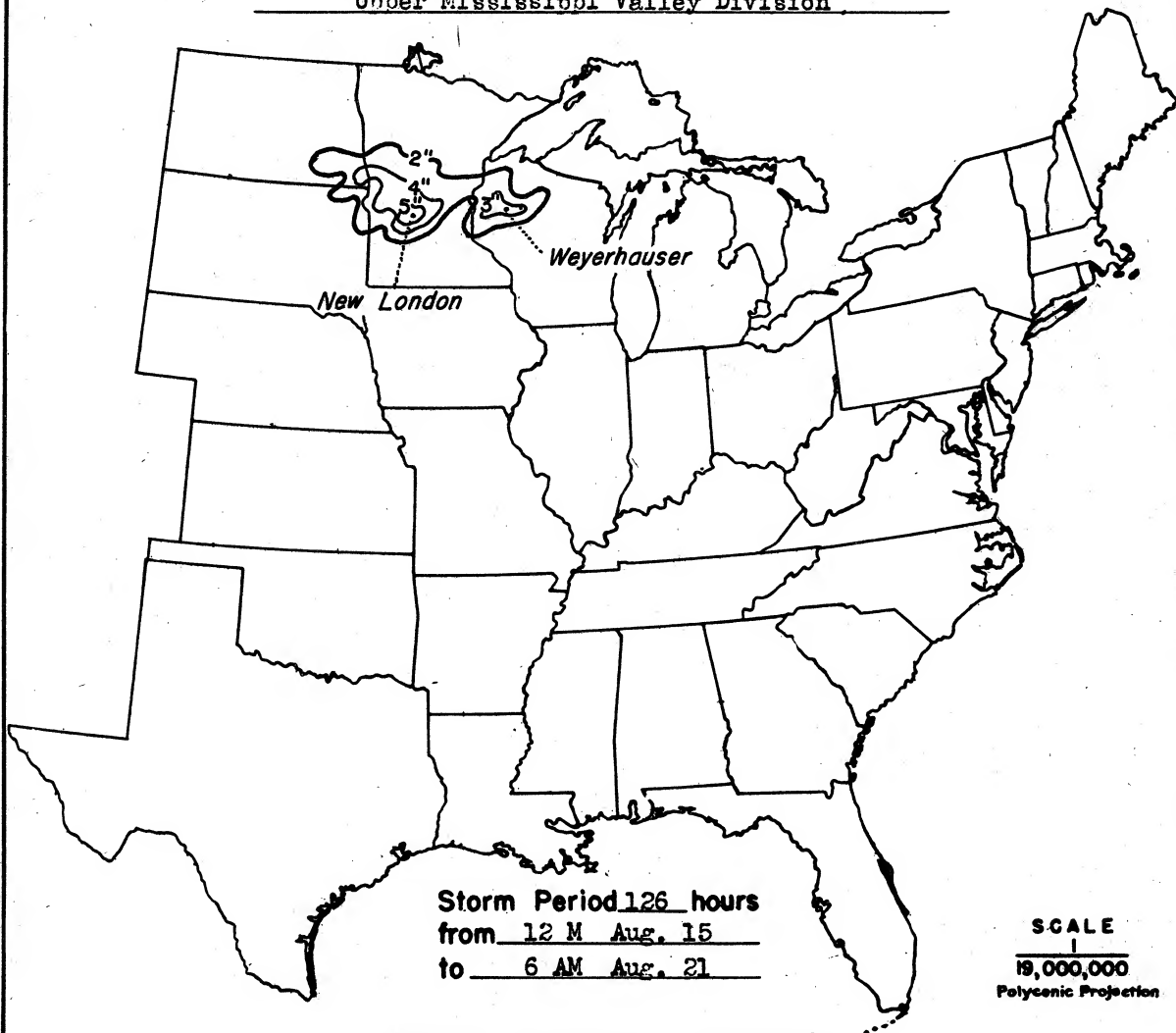
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

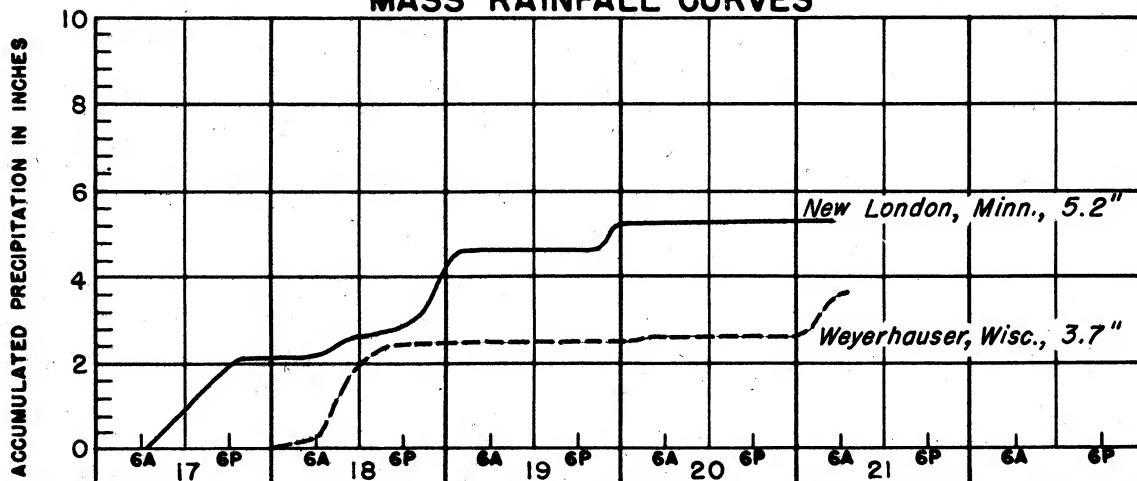
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	3.3	3.8	3.8	3.8	4.2	4.2	4.7	4.7	5.2	5.2	5.2
100	2.8	3.4	3.7	3.7	4.0	4.1	4.7	4.7	5.1	5.2	5.2
200	2.6	3.2	3.6	3.6	3.8	4.0	4.6	4.6	5.0	5.1	5.1
500	2.3	3.0	3.4	3.4	3.6	3.8	4.4	4.5	4.9	5.0	5.0
1,000	2.1	2.7	3.2	3.2	3.4	3.6	4.2	4.4	4.7	4.8	4.9
2,000	1.9	2.5	2.9	2.9	3.1	3.3	3.9	4.2	4.5	4.6	4.8
5,000	1.6	2.1	2.5	2.5	2.7	2.9	3.5	3.8	4.0	4.2	4.4
10,000	1.3	1.8	2.1	2.1	2.3	2.6	3.1	3.4	3.6	3.8	4.1
20,000	0.9	1.4	1.7	1.7	1.9	2.2	2.5	2.7	3.0	3.2	3.5
36,000	0.5	1.0	1.2	1.4	1.5	1.7	2.0	2.1	2.2	2.6	3.0

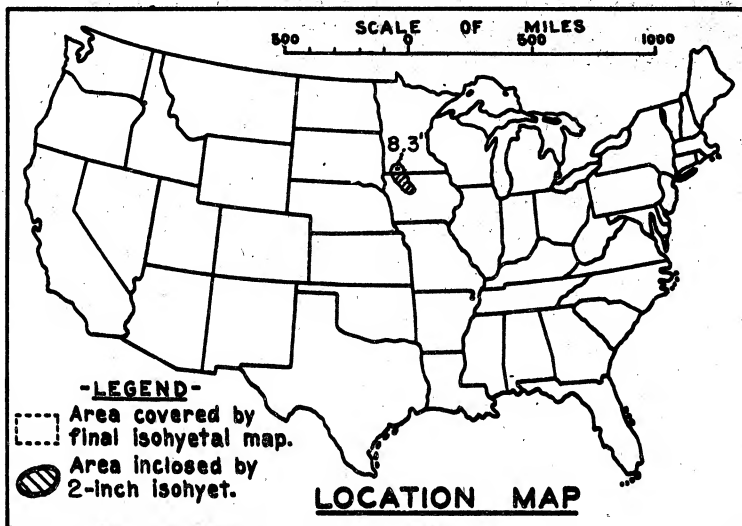
STORM STUDIES - ISOHYETAL MAP

Storm of August 16-21, 1913 Assignment UMV 1-14(A)
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 16-21 August 1913
 Assignment U M V 1 - 14 (B)

Location Minnesota - Iowa

Study Prepared by:
 Upper Mississippi Valley
 Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2/10/41

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/26/47

Remarks: Center at
 Worthington, Minnesota

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary Isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	6
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	8
Form 5002 (Mass rainfall curves)-----	17

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

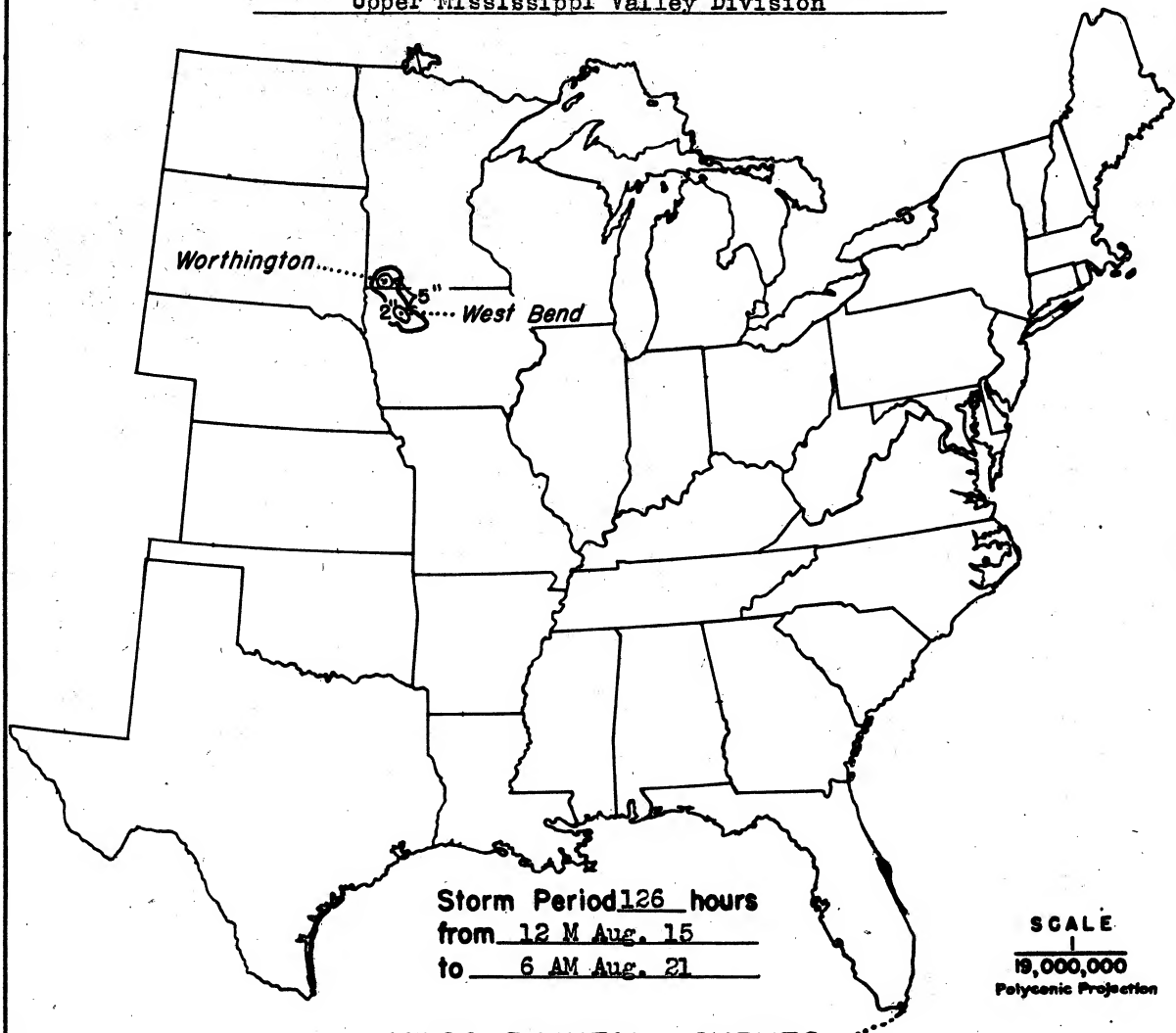
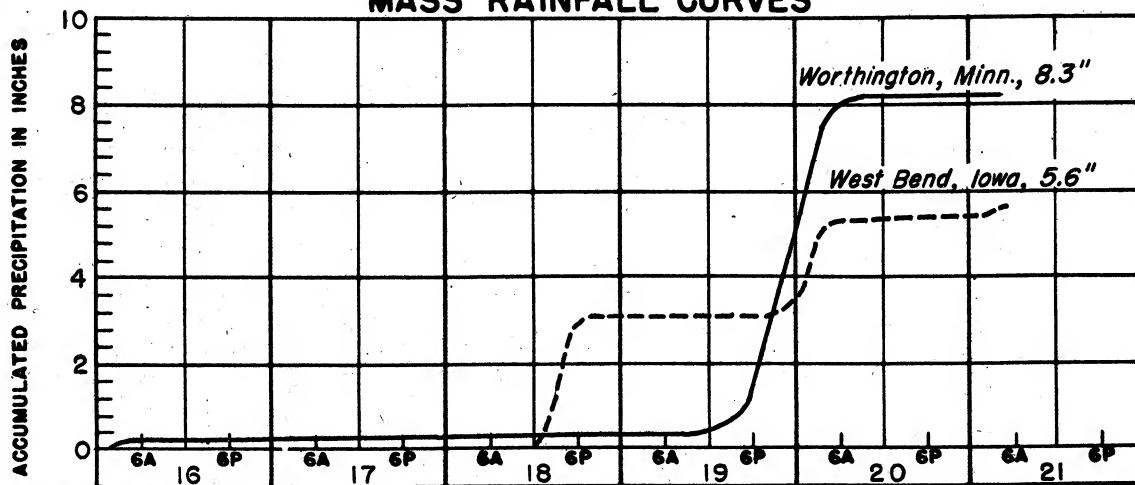
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	3

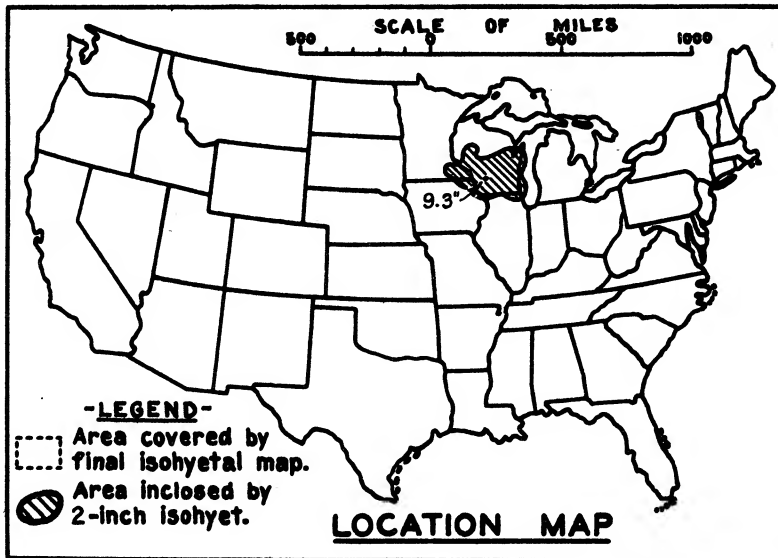
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	3.7	7.4	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.3
100	3.5	7.0	7.6	7.6	7.6	7.6	7.7	7.7	7.7	7.7	7.9
200	3.3	6.0	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.5
500	3.0	5.7	6.2	6.2	6.2	6.2	6.3	6.3	6.3	6.3	6.5
1,000	2.6	4.7	5.2	5.2	5.2	5.2	5.4	5.4	5.4	5.4	5.7
2,000	2.2	3.8	4.2	4.2	4.2	4.2	4.6	4.6	4.6	4.6	4.8
5,000	1.6	2.5	2.8	2.9	2.9	2.9	3.3	3.3	3.3	3.3	3.5

STORM STUDIES - ISOHYETAL MAP

Storm of August 16-21, 1913 Assignment UMV 1-14(B)
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 11 - 16, 1915

Assignment U M V 1 - 15

Location Wisconsin

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/10/41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/23/45

Remarks: Center at:

Dodgeville, Wisconsin

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 7
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 7
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 20

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

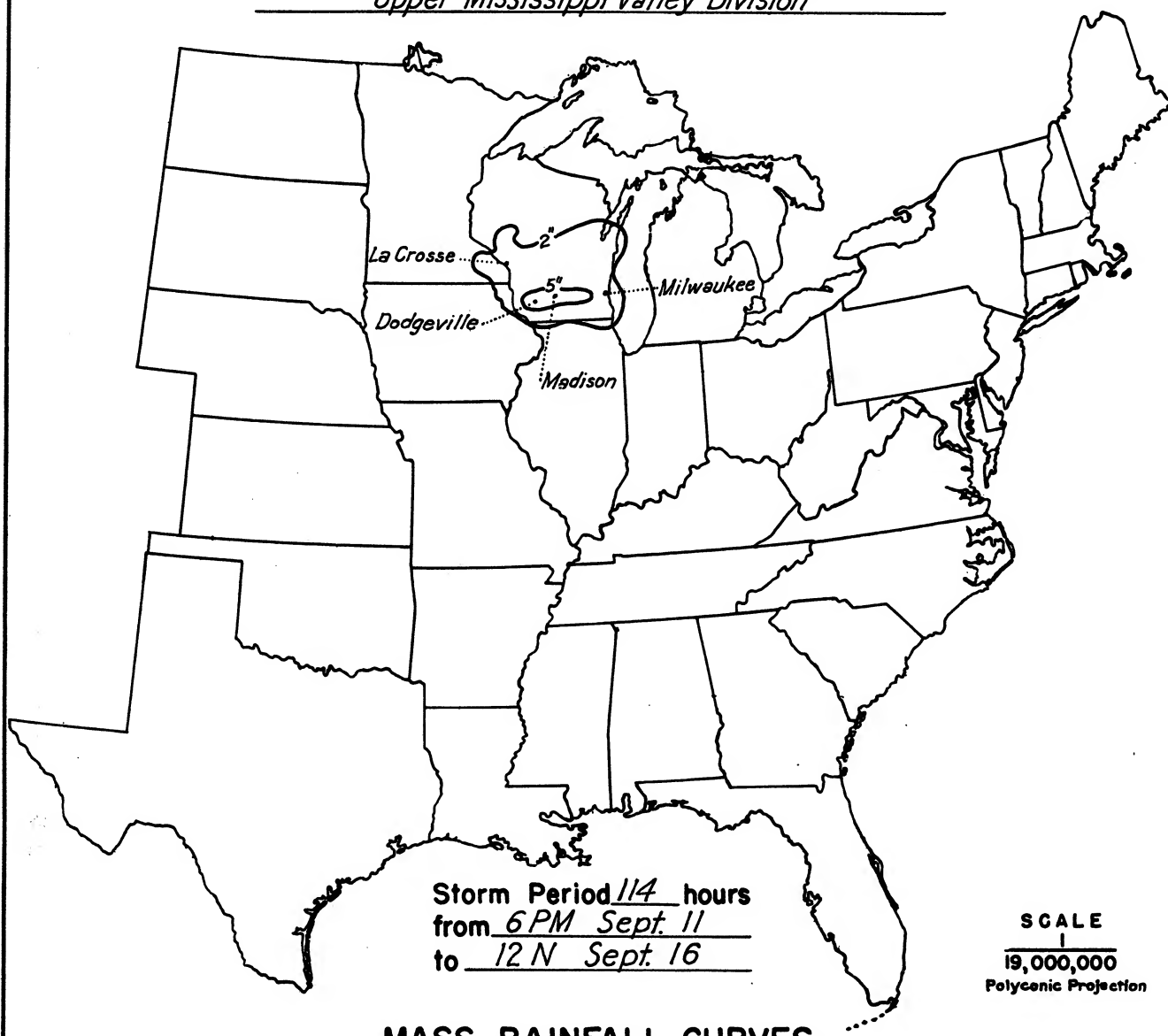
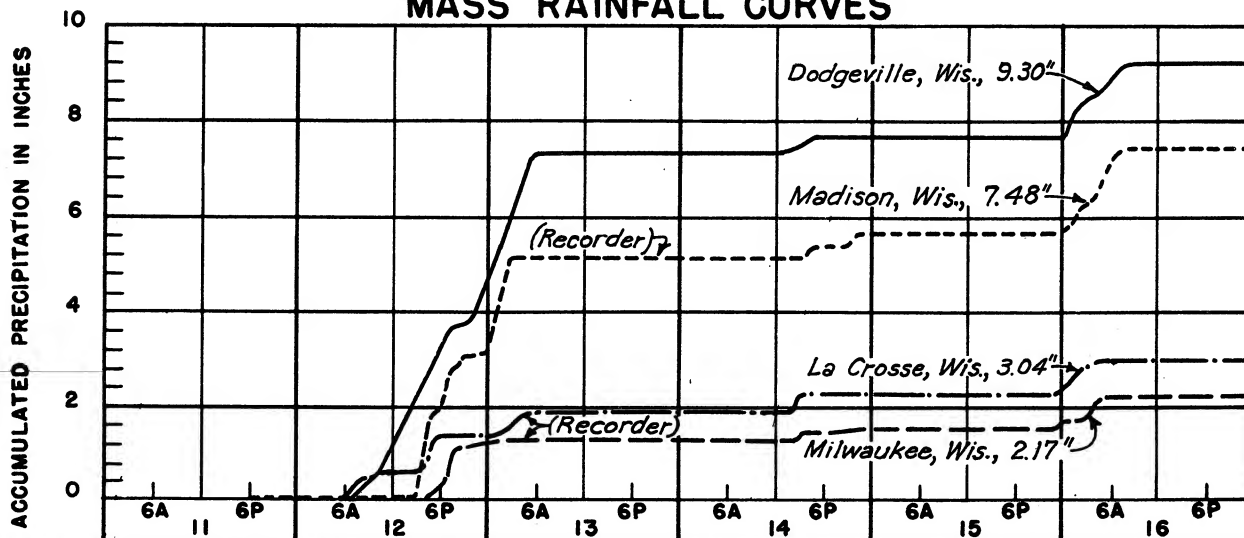
Form S-10 (Data from mass rainfall curves)----- 2
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 6
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

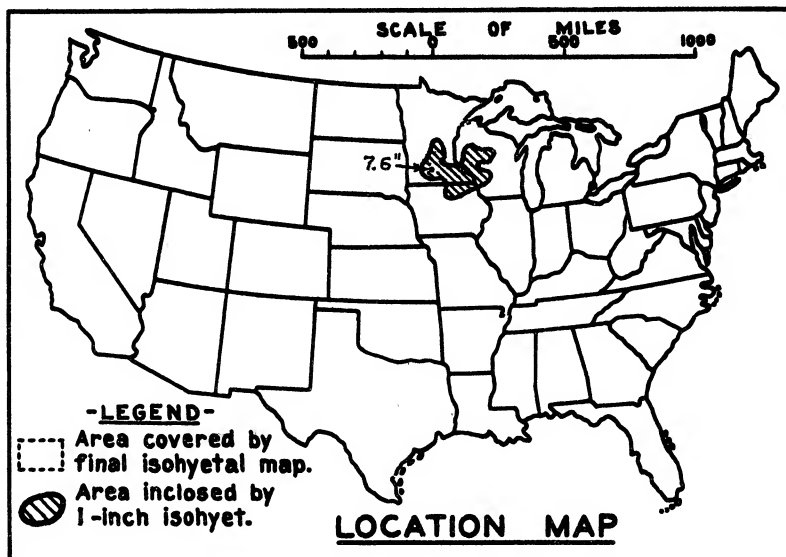
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	144
10	3.3	5.2	6.4	7.4	7.4	7.4	7.4	7.7	7.7	9.2	9.3
100	3.0	4.4	6.2	7.3	7.3	7.3	7.3	7.6	7.6	9.0	9.2
200	2.8	4.1	6.0	7.2	7.2	7.2	7.2	7.5	7.5	8.9	9.1
500	2.6	3.8	5.8	6.8	6.8	6.8	6.8	7.0	7.1	8.4	8.7
1,000	2.4	3.6	5.5	6.3	6.3	6.3	6.3	6.5	6.7	8.0	8.3
2,000	2.0	3.3	5.0	5.6	5.6	5.6	5.6	5.9	6.1	7.4	7.7
5,000	1.5	2.8	4.0	4.4	4.5	4.6	4.6	4.9	5.1	6.2	6.6
10,000	1.2	2.1	3.0	3.4	3.6	3.8	3.8	4.0	4.3	5.0	5.7
20,000	0.9	1.4	2.0	2.4	2.7	2.9	2.9	3.0	3.5	4.1	4.7
40,000	0.6	0.9	1.4	1.7	1.9	2.1	2.1	2.2	2.7	3.2	3.8

STORM STUDIES - ISOHYETAL MAP

Storm of September 11-16, 1915 Assignment UMV 1-15
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 13-17, 1916

Assignment U M V 1 - 16

Location Minnesota

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2-7-40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9-26-45

Remarks: Centers at:

New Ulm and Chatfield, Minn.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 3
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 3
 Misc. precip. records, meteorological data, etc.----- 2
 Form 5002 (Mass rainfall curves)----- 9

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 2
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 4
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

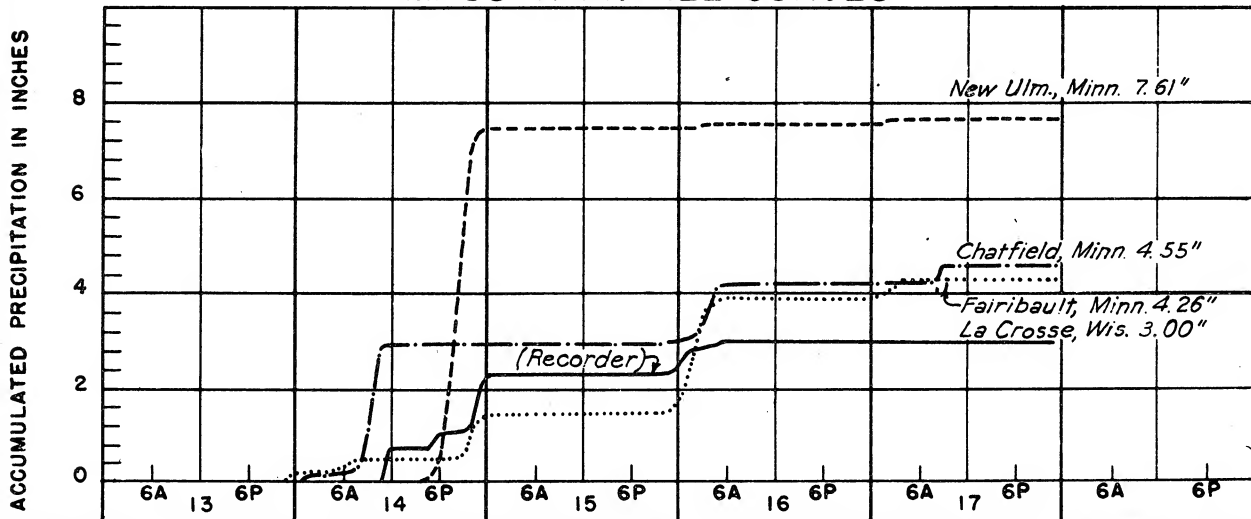
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

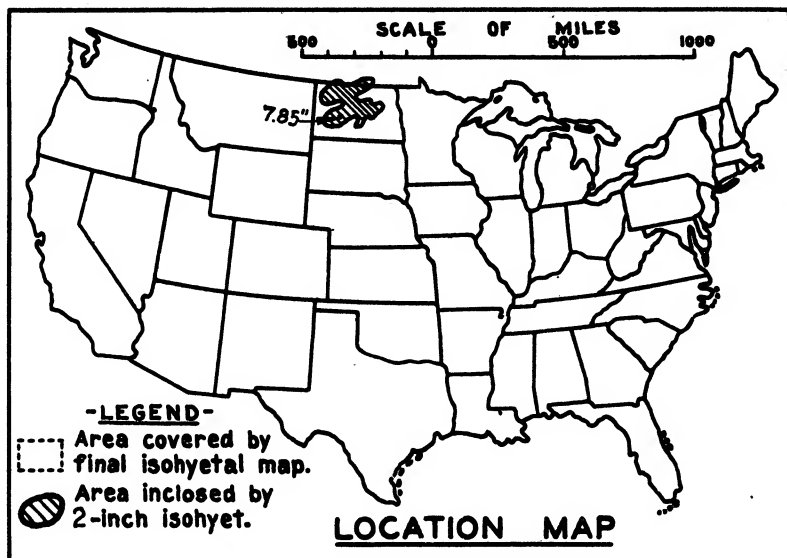
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	
10	7.3	7.4	7.4	7.4	7.5	7.5	7.5	7.6	7.6	7.6	
50	7.2	7.3	7.3	7.3	7.4	7.4	7.4	7.5	7.5	7.5	
100	7.0	7.1	7.1	7.1	7.2	7.2	7.2	7.3	7.3	7.3	
200	6.6	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.1	
500	5.8	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.6	
1,000	5.0	5.4	5.6	5.6	5.7	5.7	5.8	5.9	5.9	6.2	
2,000	4.1	4.7	4.9	4.9	5.1	5.1	5.2	5.4	5.4	5.6	
5,000	2.5	3.0	3.4	3.5	3.6	3.6	3.9	4.2	4.2	4.4	
10,000	1.5	1.8	2.3	2.5	2.6	2.6	3.0	3.3	3.3	3.5	
20,000	0.8	1.1	1.5	1.7	1.9	1.9	2.2	2.5	2.5	2.7	
30,000	0.5	0.8	1.1	1.4	1.6	1.6	1.8	2.1	2.1	2.3	

STORM STUDIES - ISOHYETAL MAP

Storm of July 13-17, 1916 Assignment UMV 1-16Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 5 - 8, 1928

Assignment U M V 1 - 18

Location N.W. No. Dakota

Study Prepared by:

Upper Mississippi Valley
DivisionSt. Paul District Office
Part I Reviewed by H. M. Sec. of

Weather Bureau, 7/10/41

Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/9/44

Remarks: Center at

Berthold Agency, N. Dakota

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 6

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 5

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 12

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 6

Maximum duration-depth-area curves----- 1

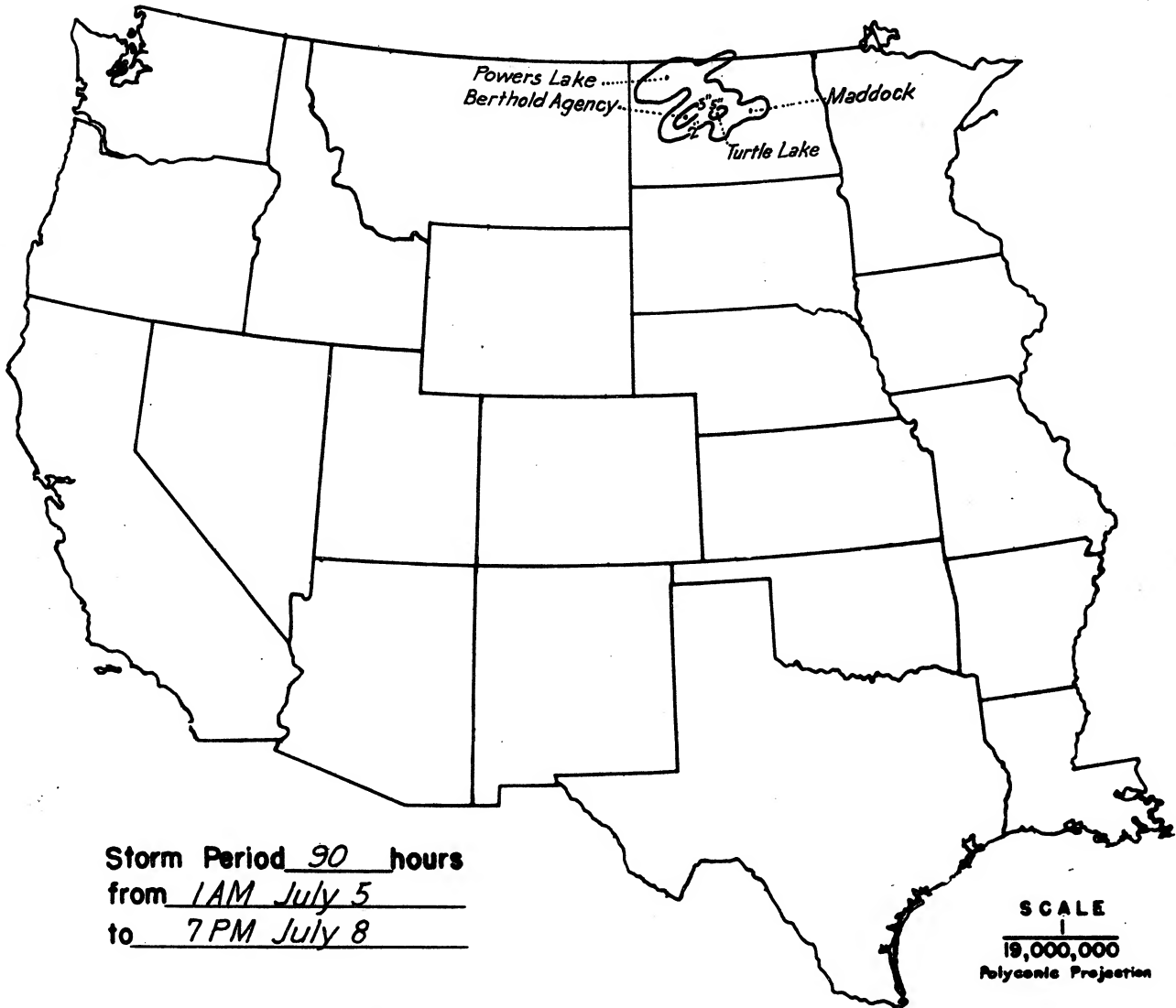
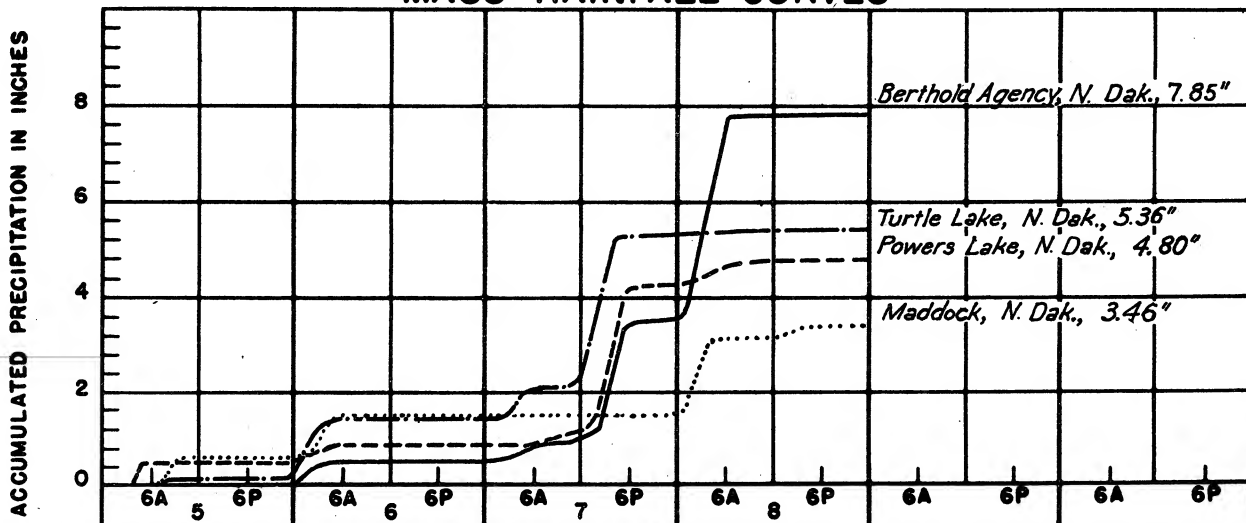
Data relating to periods of maximum rainfall----- 2

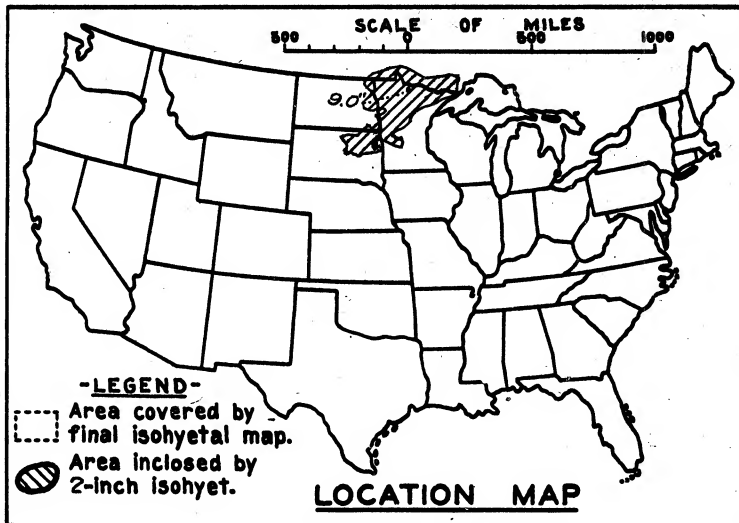
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	4.2	4.3	6.8	6.9	7.3	7.3	7.3	7.8	7.8	
100	4.0	4.2	6.5	6.7	7.1	7.1	7.1	7.6	7.6	
200	3.9	4.1	6.4	6.6	7.0	7.0	7.0	7.6	7.6	
500	3.7	4.0	6.2	6.4	6.8	6.8	6.8	7.4	7.4	
1,000	3.3	3.6	5.6	5.8	6.2	6.2	6.2	7.0	7.0	
2,000	2.7	3.1	4.7	4.9	5.3	5.3	5.3	6.1	6.1	
5,000	2.0	2.3	3.4	3.7	4.1	4.1	4.1	4.8	4.9	
10,000	1.4	1.7	2.6	2.9	3.2	3.3	3.3	3.9	4.0	
20,000	1.0	1.2	1.9	2.1	2.4	2.5	2.5	3.1	3.2	

STORM STUDIES - ISOHYETAL MAP

Storm of July 5-8, 1928 Assignment UMV I-18
Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 11-16 July 1937
 Assignment U M V 1 - 20
 Location Minn., N. D., & S. D.
 Study Prepared by:

Upper Mississippi Valley
 Division
 St. Paul District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/10/41

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/11/46

Remarks: Center at
 Baudette, Minn.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	9
Misc. precip. records, meteorological data, etc.-----	11
Form 5002 (Mass rainfall curves)-----	25

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

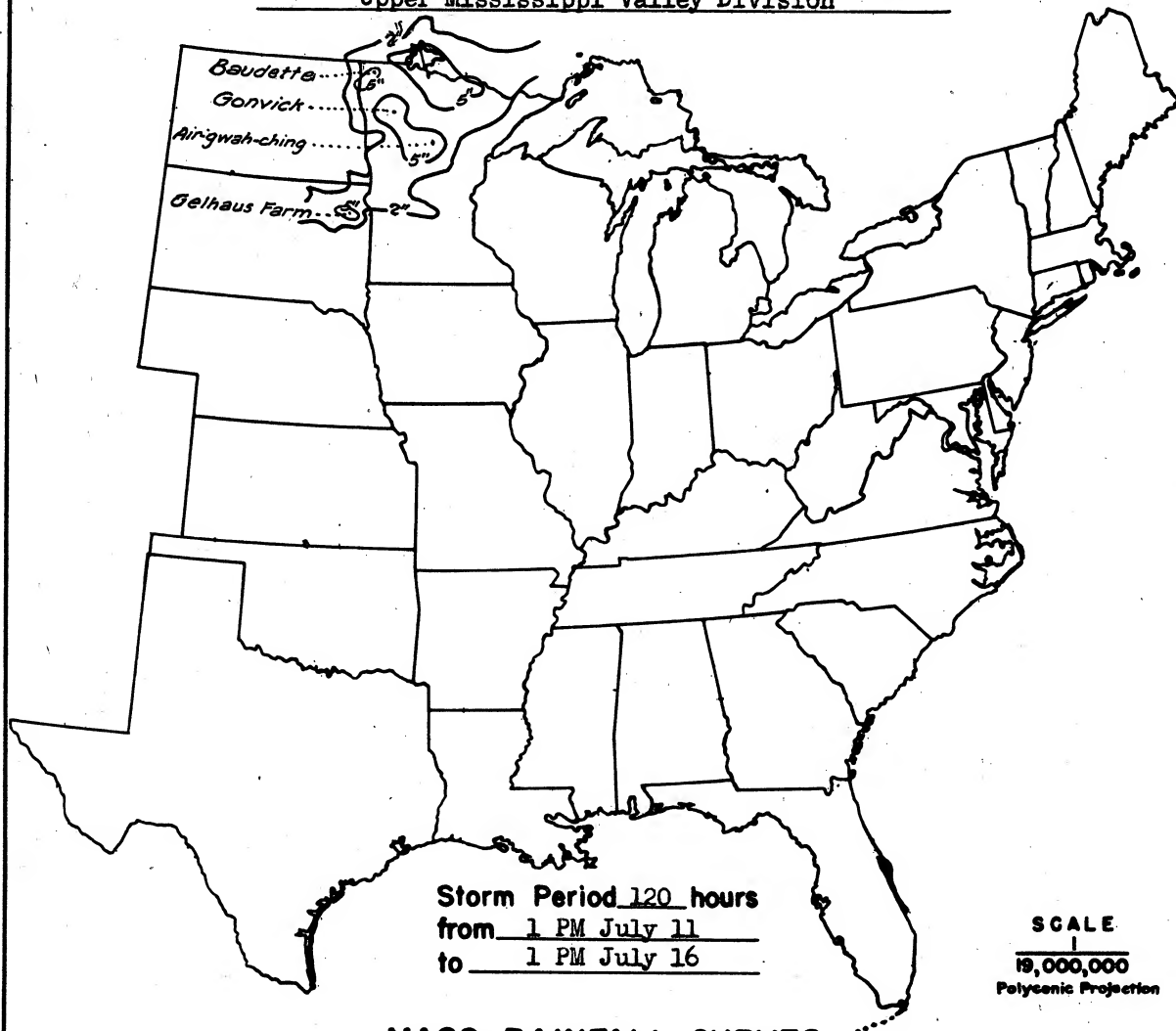
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

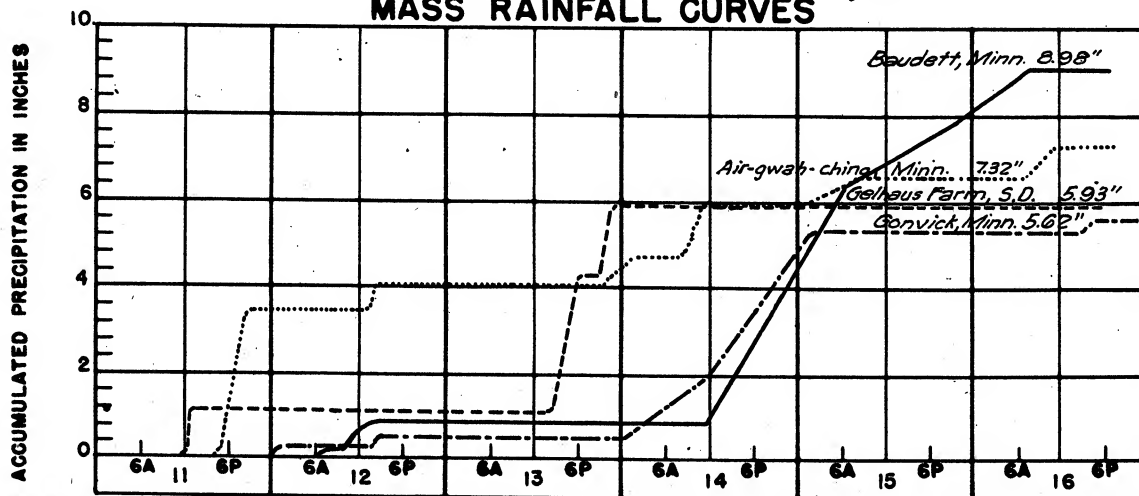
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

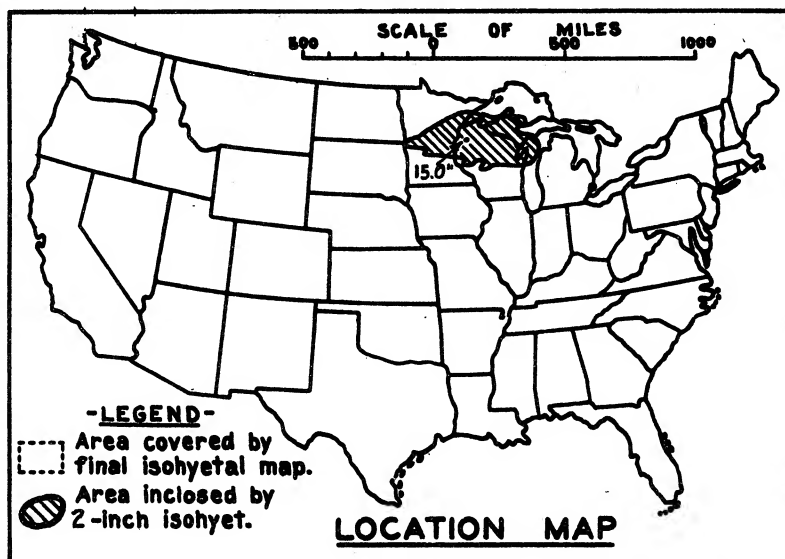
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	3.5	4.8	5.6	6.2	6.5	7.2	8.0	8.1	8.1	8.7	9.0
100	3.0	4.6	5.4	6.0	6.4	7.0	7.9	8.0	8.0	8.5	8.9
200	2.8	4.4	5.3	5.9	6.3	6.9	7.8	7.9	7.9	8.4	8.8
500	2.5	4.2	5.0	5.6	6.0	6.7	7.6	7.7	7.7	8.2	8.5
1,000	2.2	3.8	4.7	5.2	5.6	6.1	7.2	7.3	7.4	7.7	8.2
2,000	2.0	3.1	4.1	4.6	4.8	5.4	6.5	6.7	6.8	7.0	7.7
5,000	1.6	2.6	3.4	3.9	4.1	4.6	5.5	5.8	5.9	6.1	6.9
10,000	1.3	2.1	3.0	3.4	3.6	4.0	4.6	5.1	5.2	5.4	6.2
20,000	1.0	1.7	2.3	2.7	3.0	3.3	3.9	4.3	4.5	4.7	5.4
50,000	0.6	1.0	1.4	1.7	1.9	2.3	2.7	3.1	3.4	3.7	4.2
70,000	0.5	0.7	1.0	1.3	1.5	1.8	2.3	2.6	3.0	3.2	3.7

STORM STUDIES - ISOHYETAL MAP

Storm of July 11 - 16, 1937 Assignment UMV 1-20Study Prepared by: St. Paul, Minn. DistrictUpper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 28 - 31, 1941
 Assignment U M V 1 - 22
 Location Northern Wisconsin and
 Study Prepared by: Minn.
 Upper Mississippi Valley
 Division

St. Paul District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 3/24/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/11/45

Remarks: Center at:
 Haywood and Moose Lake, Wisc.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 4 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	33
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	14
Misc. precip. records, meteorological data, etc.-----	3
Form 5002 (Mass rainfall curves)-----	42

PART II

Final isohyetal maps, in 1 sheet, scale 1,000,000

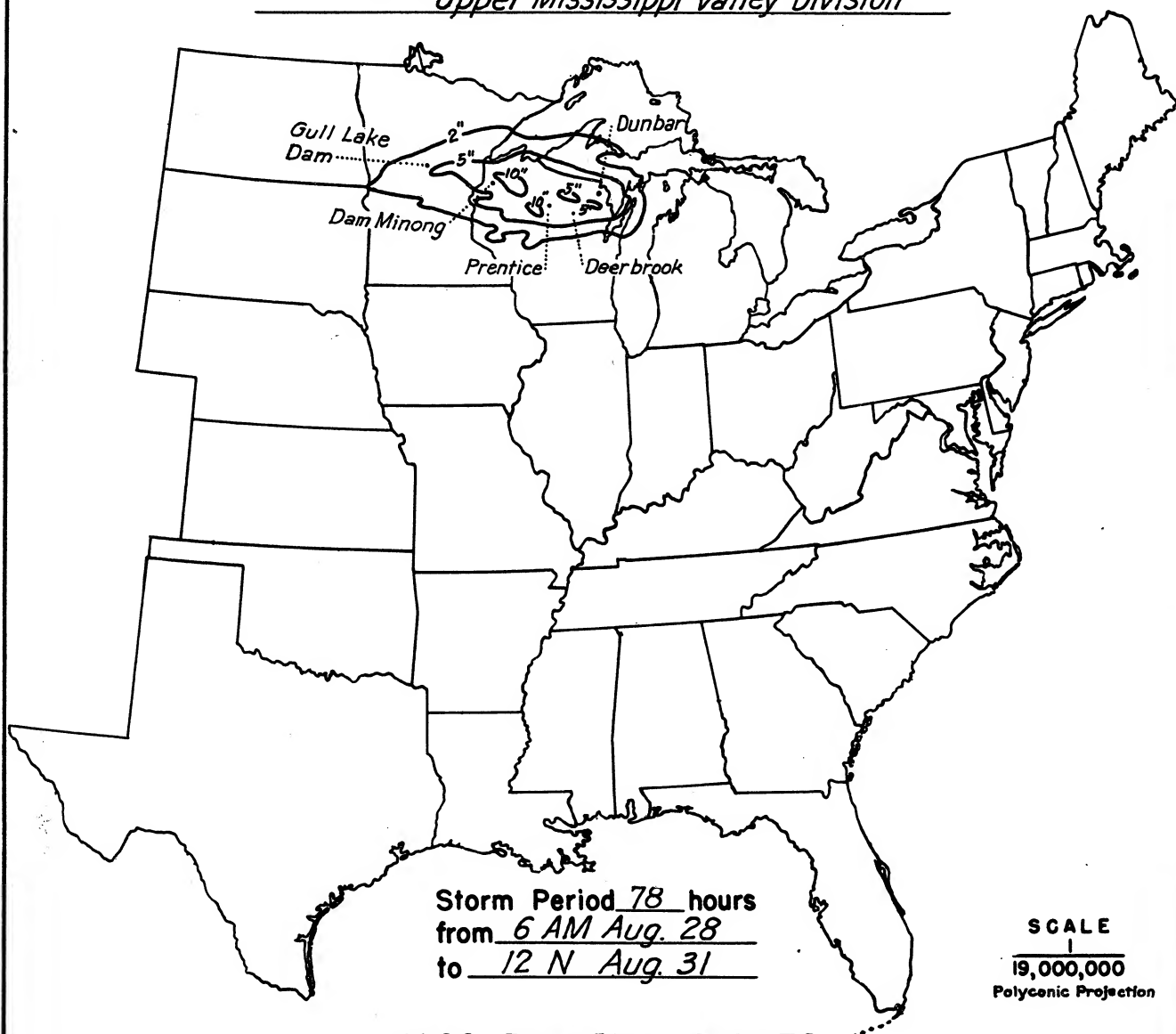
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	6
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

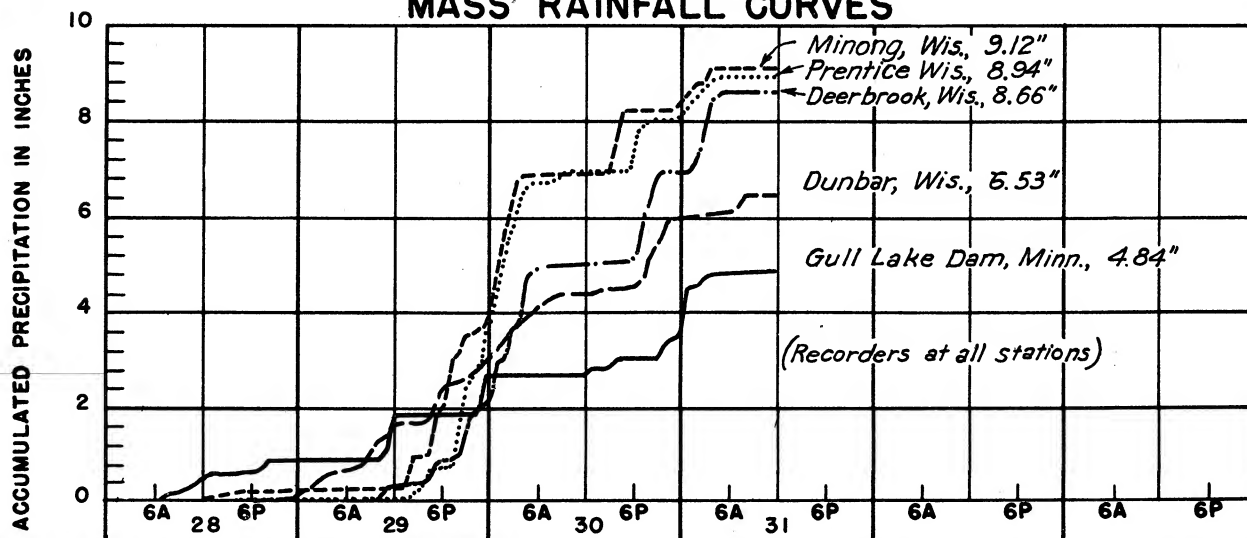
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

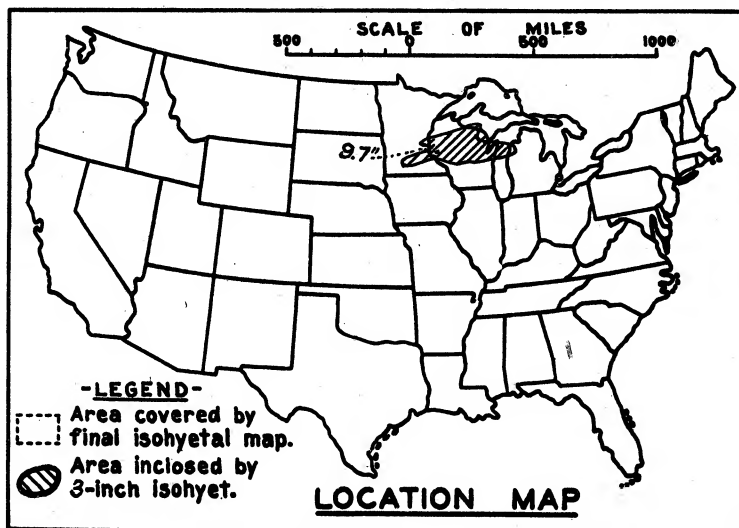
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	78
10	8.5	11.5	12.4	12.4	13.3	13.8	14.4	15.0	15.0	15.0
100	8.1	11.0	11.8	11.8	12.7	13.3	13.8	14.3	14.5	14.5
200	7.8	10.6	11.3	11.3	12.3	13.0	13.4	13.9	14.1	14.1
500	6.8	9.5	10.2	10.3	11.2	12.0	12.5	12.9	13.1	13.1
1,000	5.6	8.2	9.0	9.1	10.0	10.9	11.5	11.9	12.0	12.0
2,000	4.3	6.9	7.7	7.9	8.8	9.7	10.4	10.8	10.9	10.9
5,000	3.0	5.2	5.9	6.3	7.2	8.1	8.9	9.3	9.5	9.5
10,000	2.1	3.8	4.6	5.1	5.9	6.8	7.8	8.2	8.4	8.4
20,000	1.5	2.7	3.4	3.8	4.7	5.5	6.5	7.1	7.3	7.3
50,000	0.9	1.6	2.1	2.5	3.1	3.6	4.5	5.1	5.2	5.2
60,000	0.8	1.4	1.9	2.2	2.8	3.3	4.1	4.5	4.7	4.7

STORM STUDIES - ISOHYETAL MAP

Storm of August 28-31, 1941 Assignment UMV 1-22Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 15-19 September 1942

Assignment U M V 1 - 25

Location Minn., Wis., Mich.

Study Prepared by:

Upper Mississippi Valley
Division

St. Paul District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 4-14-43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1-9-46

Remarks:

Center at
Woodville, Wisconsin**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	59
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	24
Misc. precip. records, meteorological data, etc.-----	7
Form 5002 (Mass rainfall curves)-----	70

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

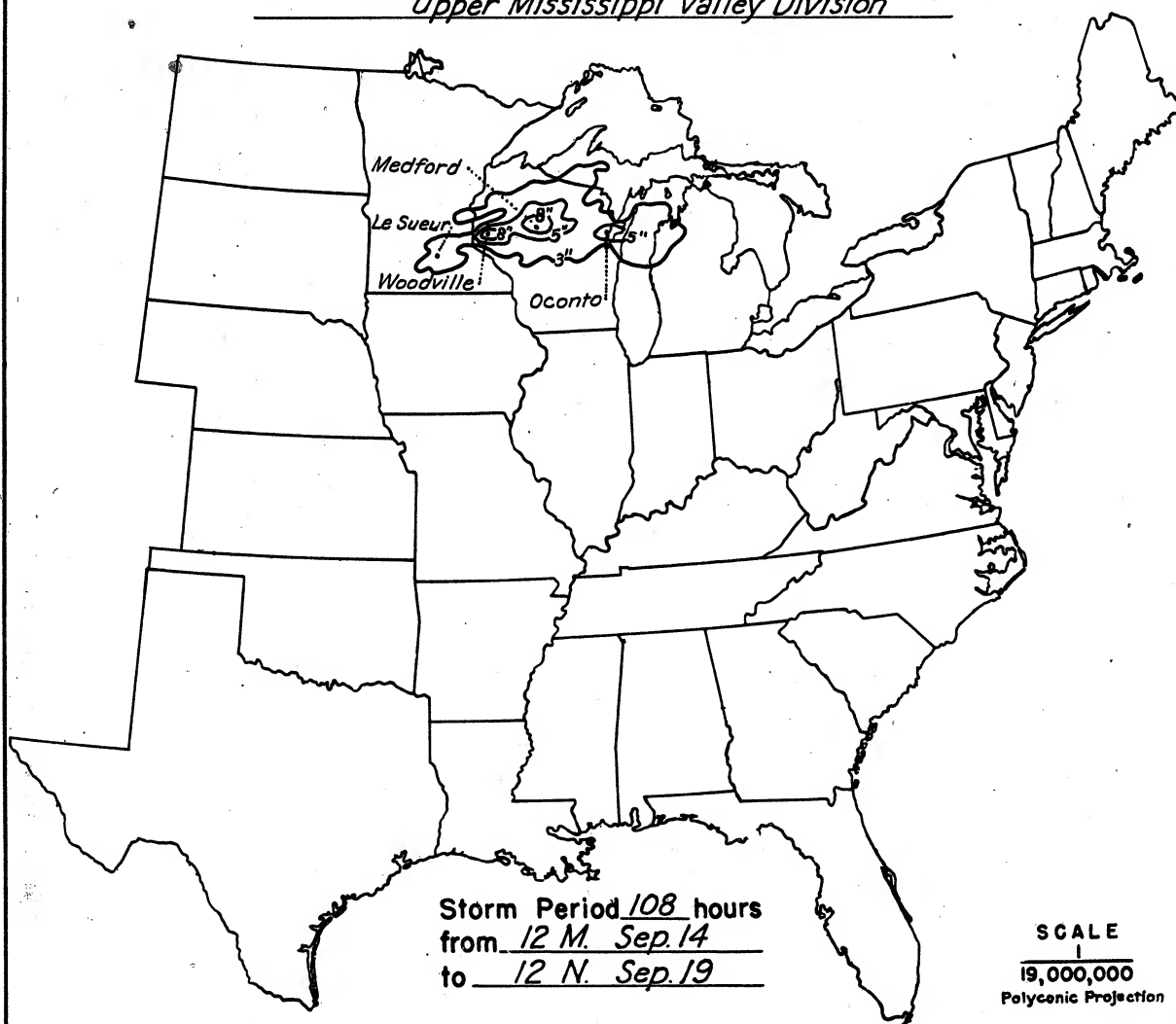
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	13
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	15
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

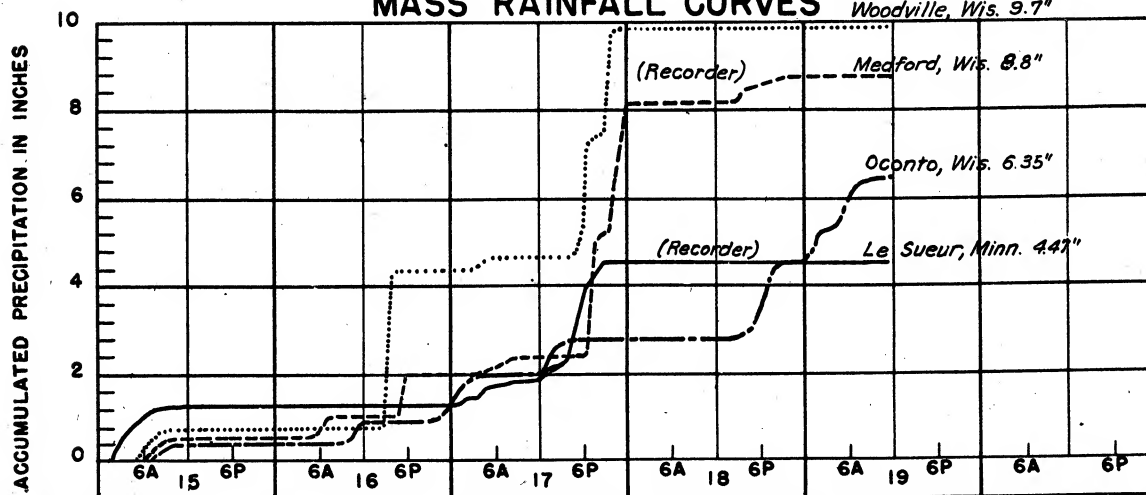
Area in Sq. Mi.	Duration of Rainfall In Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	5.8	6.0	6.0	6.3	7.9	9.0	9.0	9.1	9.7	9.7	9.7
100	5.0	5.8	5.8	6.1	7.1	8.2	8.2	8.2	8.9	9.2	9.2
200	4.7	5.6	5.6	6.0	6.6	7.7	7.7	7.7	8.5	8.9	8.9
500	4.2	5.1	5.1	5.6	5.9	6.9	7.1	7.1	7.8	8.4	8.4
1,000	3.5	4.3	4.5	4.9	5.3	6.3	6.5	6.5	7.3	7.9	7.9
2,000	2.9	3.7	3.9	4.2	4.6	5.7	5.9	5.9	6.7	7.4	7.4
5,000	2.4	3.1	3.2	3.5	3.8	4.8	5.2	5.3	6.0	6.6	6.6
10,000	1.9	2.6	2.7	3.0	3.2	4.1	4.6	4.7	5.3	5.8	5.8
20,000	1.5	2.0	2.2	2.5	2.6	3.3	3.8	4.0	4.5	5.0	5.1
40,000	1.1	1.5	1.6	1.9	2.1	2.7	2.9	3.2	3.7	4.2	4.3

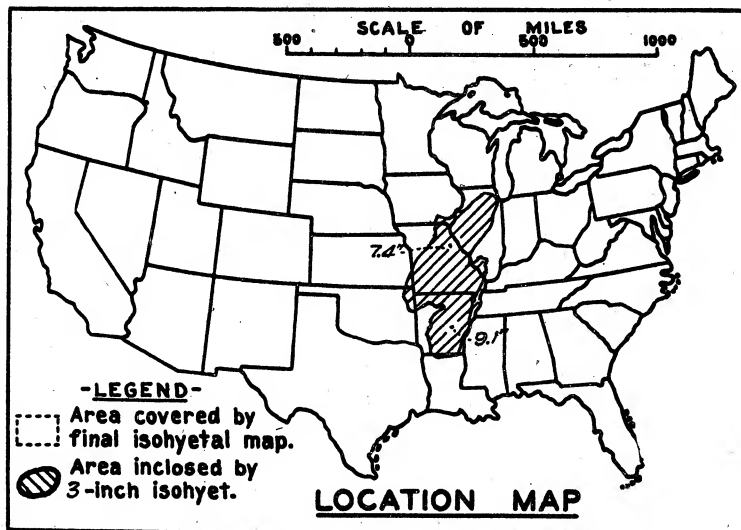
STORM STUDIES - ISOHYETAL MAP

Storm of September 15-19, 1942 Assignment UMV I-25Study Prepared by: St. Paul, Minn. District
Upper Mississippi Valley DivisionStorm Period 108 hours
from 12 M. Sep. 14
to 12 N. Sep. 19SCALE
1
19,000,000
Polycenic Projection

MASS RAINFALL CURVES

Woodville, Wis. 9.7"



STORM STUDIES - PERTINENT DATA SHEET

Storm of 31 Dec. 1896-3 Jan. 1897

Assignment UMW 2-1

Location Ill.-Ia.-Mo.-Ark.-Okla.

Study Prepared by:

Upper Mississippi Valley

Division

Rock Island District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 9/29/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/13/46Remarks: Centers at
Pine Bluff, Arkansas and
Warrenton, Missouri**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	13
Form 5001-B (24-hour " ")	-
Form 5001-D (" " " ")	14
Misc. precip. records, meteorological data, etc.	1
Form 5002 (Mass rainfall curves)	37

PART II

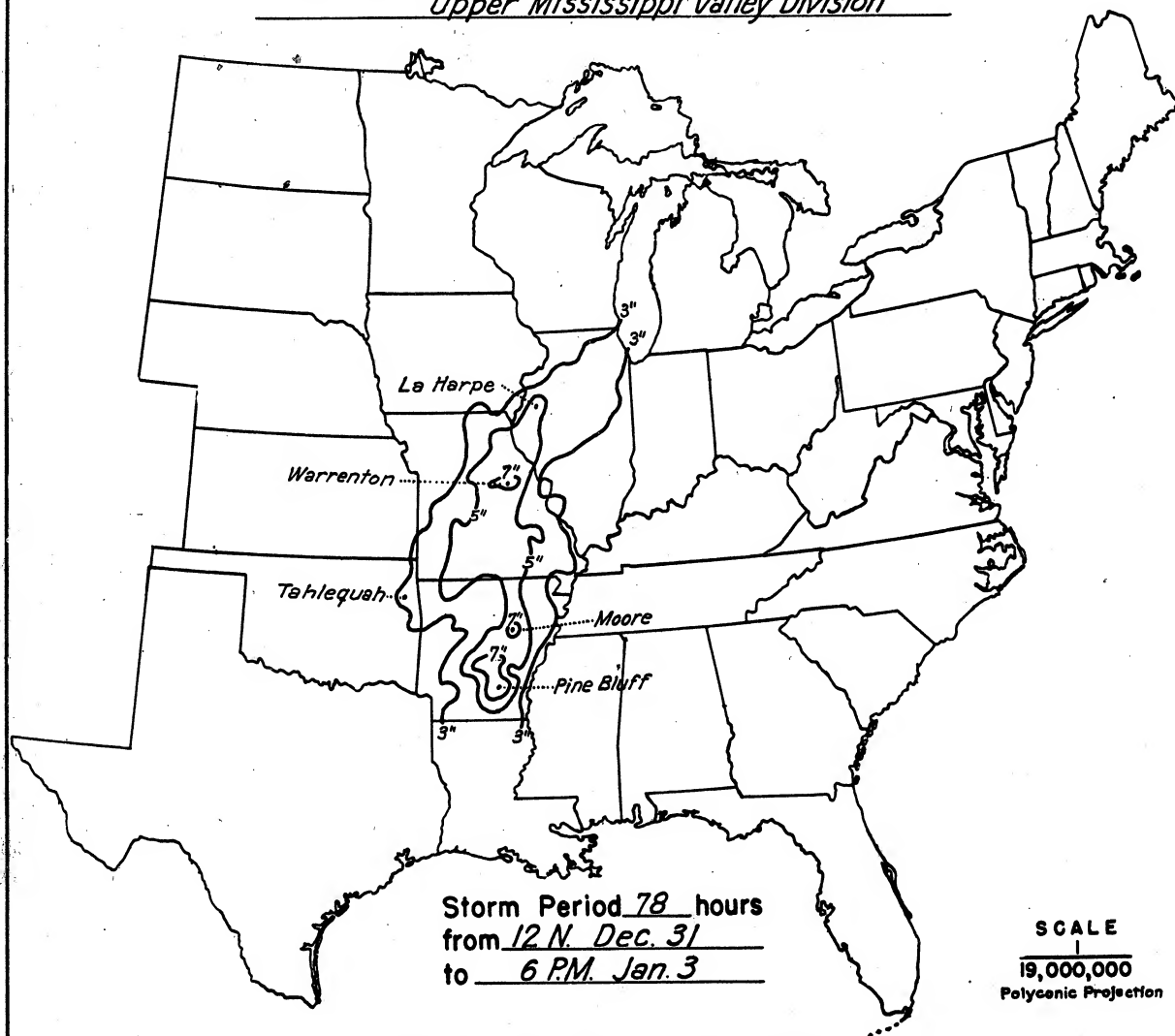
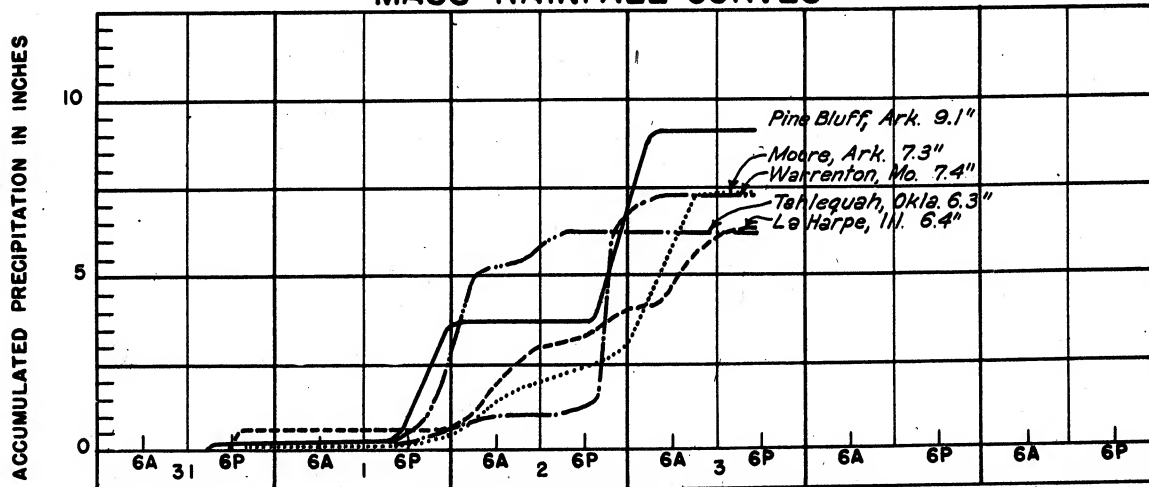
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

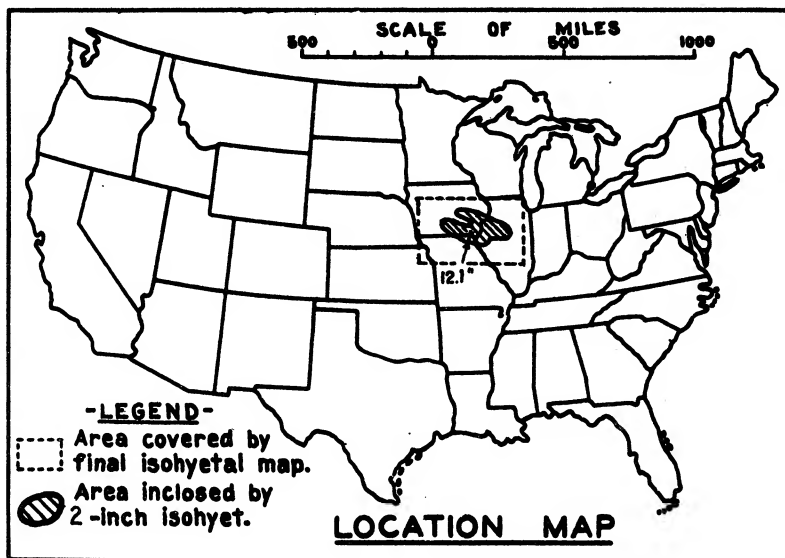
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)	8
Form S-11 (Depth-area data from isohyetal map)	4
Form S-12 (Maximum depth-duration data)	53
Maximum duration-depth-area curves	1
Data relating to periods of maximum rainfall	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	78
10	5.6	6.0	6.3	6.3	6.8	8.6	9.0	9.1	9.1	9.1
100	5.4	5.8	6.1	6.2	6.7	8.1	8.7	8.7	8.8	8.8
200	5.3	5.7	6.0	6.1	6.6	8.0	8.6	8.6	8.7	8.7
500	5.0	5.5	5.8	5.9	6.4	7.6	8.3	8.3	8.4	8.4
1,000	4.7	5.2	5.6	5.7	6.3	7.3	7.9	7.9	8.0	8.0
2,000	4.2	4.9	5.2	5.4	6.1	7.0	7.5	7.5	7.6	7.6
5,000	3.4	4.4	4.7	5.0	5.8	6.5	7.0	7.0	7.1	7.1
10,000	2.8	3.8	4.3	4.6	5.5	6.1	6.6	6.6	6.7	6.7
20,000	2.1	3.2	3.8	4.2	5.1	5.6	6.1	6.1	6.2	6.2
50,000	1.3	2.3	2.9	3.5	4.2	4.9	5.4	5.4	5.5	5.5
100,000	1.0	1.7	2.2	2.9	3.6	4.1	4.6	4.6	4.8	4.8
118,000	0.9	1.5	2.0	2.8	3.4	3.9	4.4	4.4	4.6	4.6

STORM STUDIES - ISOHYETAL MAPStorm of December 31, 1896 to January 3, 1897 Assignment UMV 2-1Study Prepared by: Rock Island District
Upper Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of June 9 - 10, 1905
 Assignment U M V 2 - 5
 Location S.E. Ia. and W. Cent. Ill.
 Study Prepared by:
 Upper Mississippi Valley
 Division

Rock Island District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/20/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 6/22/44

Remarks: Centers at:

Bonapart (Near), Ia., and
 Le Harpe, Ill.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	8
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	6
Misc. precip. records, meteorological data, etc.....	4
Form 5002 (Mass rainfall curves).....	19

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

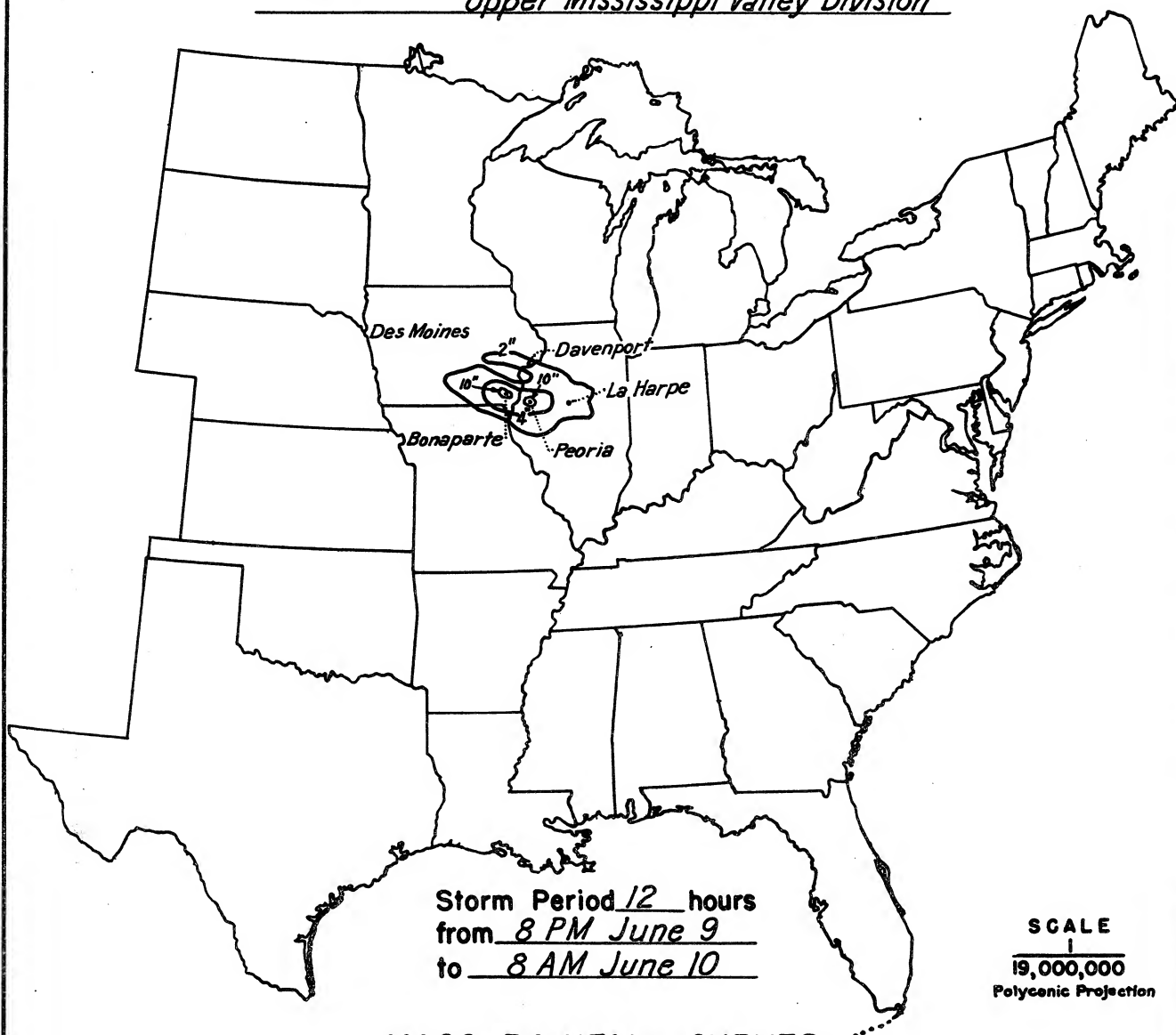
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	6
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

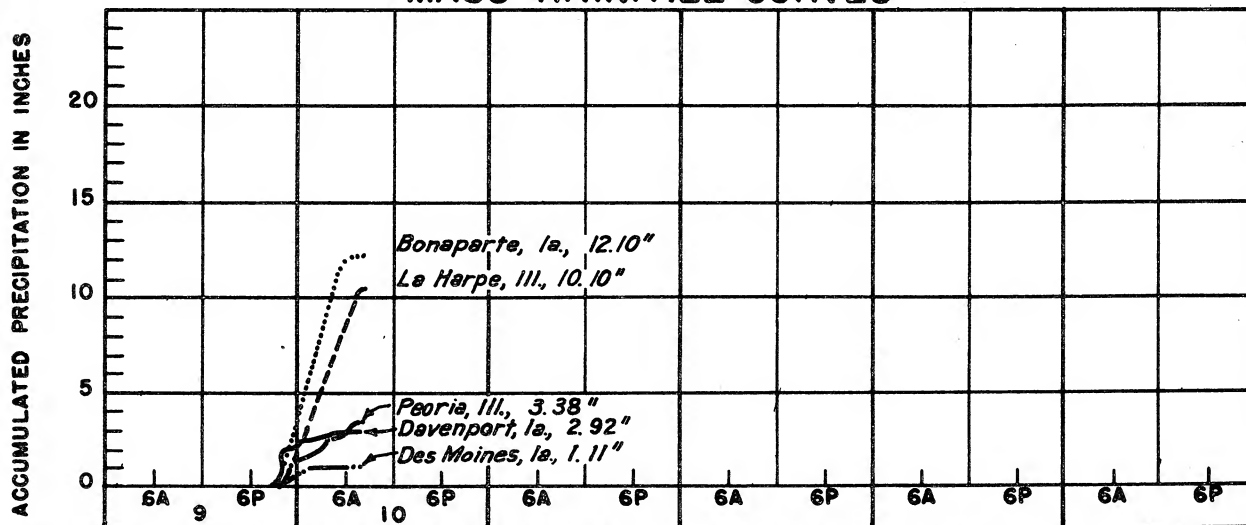
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

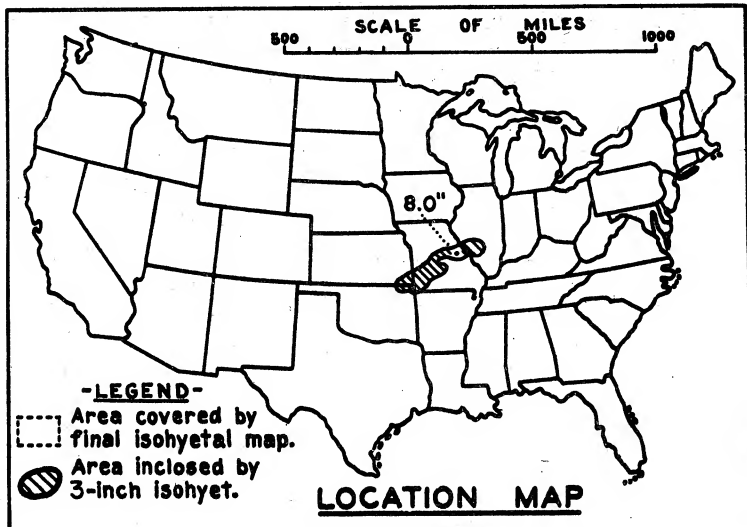
Area in Sq. Mi.	Duration of Rainfall in Hours										
	1	2	3	4	5	6	7	8	10	12	
Max. Station	2.0	4.0	6.0	8.0	9.9	10.2	10.8	11.4	11.9	12.1	
10	2.0	4.0	5.9	7.9	9.7	10.0	10.5	11.2	11.8	12.0	
100	1.9	3.7	5.6	7.2	8.7	9.2	9.8	10.5	11.3	11.5	
200	1.8	3.6	5.5	7.0	8.4	8.9	9.5	10.2	11.1	11.3	
500	1.8	3.5	5.2	6.6	7.8	8.5	9.1	9.7	10.5	10.7	
1,000	1.7	3.4	4.9	6.2	7.4	8.0	8.6	9.0	9.8	10.0	
2,000	1.6	3.1	4.5	5.6	6.7	7.2	7.8	8.1	8.8	9.1	
5,000	1.3	2.5	3.5	4.5	5.2	5.8	6.2	6.5	7.0	7.3	
10,000	1.0	1.9	2.7	3.4	3.9	4.4	4.8	5.0	5.4	5.6	
20,000	0.7	1.3	1.7	2.1	2.5	3.0	3.1	3.3	3.7	3.9	

STORM STUDIES - ISOHYETAL MAP

Storm of June 9-10, 1905 Assignment UMV 2-5Study Prepared by: Rock Island, Ill., District
Upper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 16-19 Oct. 1905

Assignment UMV 2-6

Location Ark.-Ill.-Kans.-Mo.-Okla.

Study Prepared by:

Upper Mississippi

Valley Division

Rock Island District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 2/28/46

Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 6/28/46

Remarks: Center at New Haven, Missouri.

DATA AND COMPUTATIONS COMPILED**PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	16
Form 5001-B (24-hour " ")	---
Form 5001-D (" " " ")	6
Misc. precip. records, meteorological data, etc.	1
Form 5002 (Mass rainfall curves)	21

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

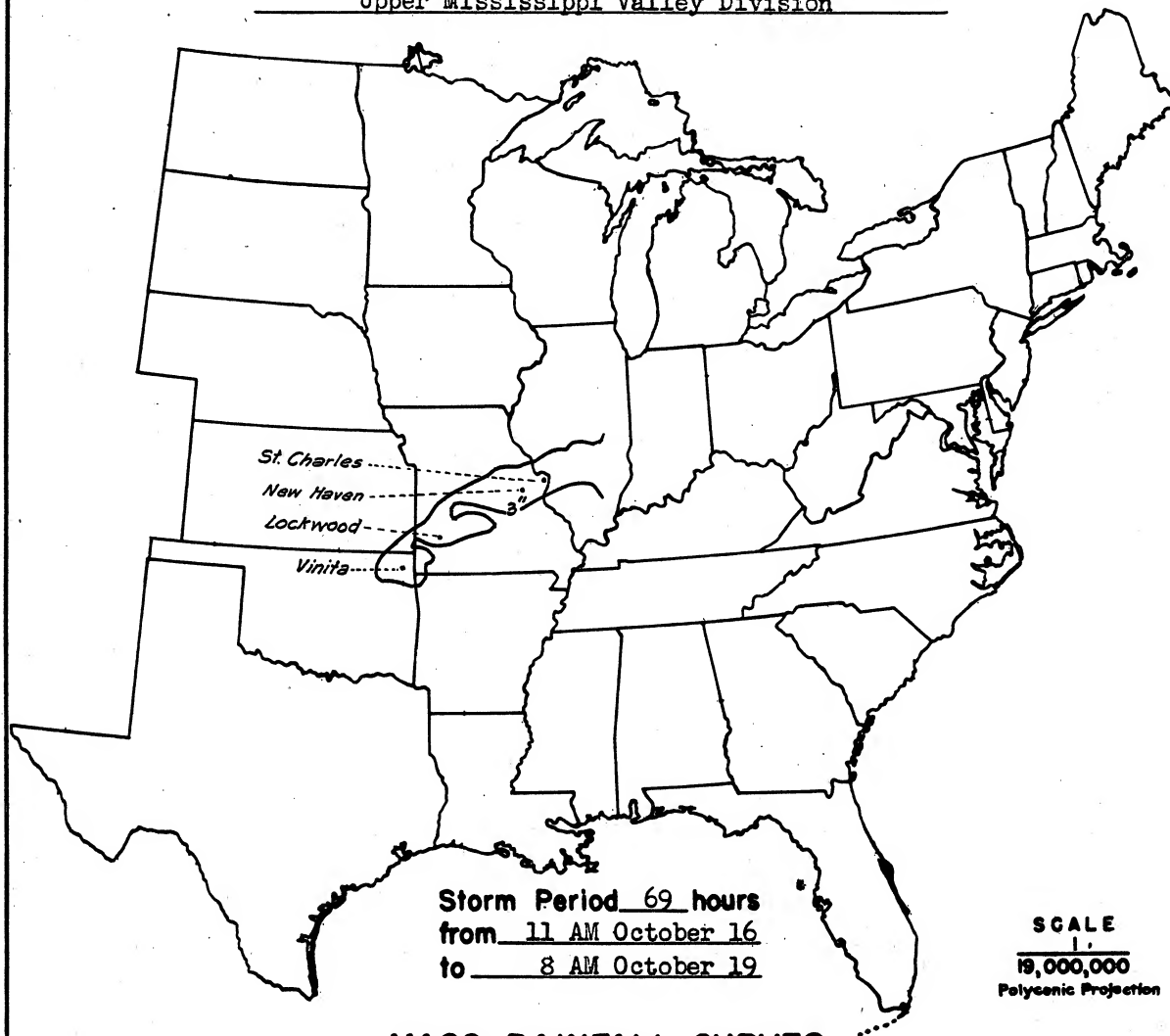
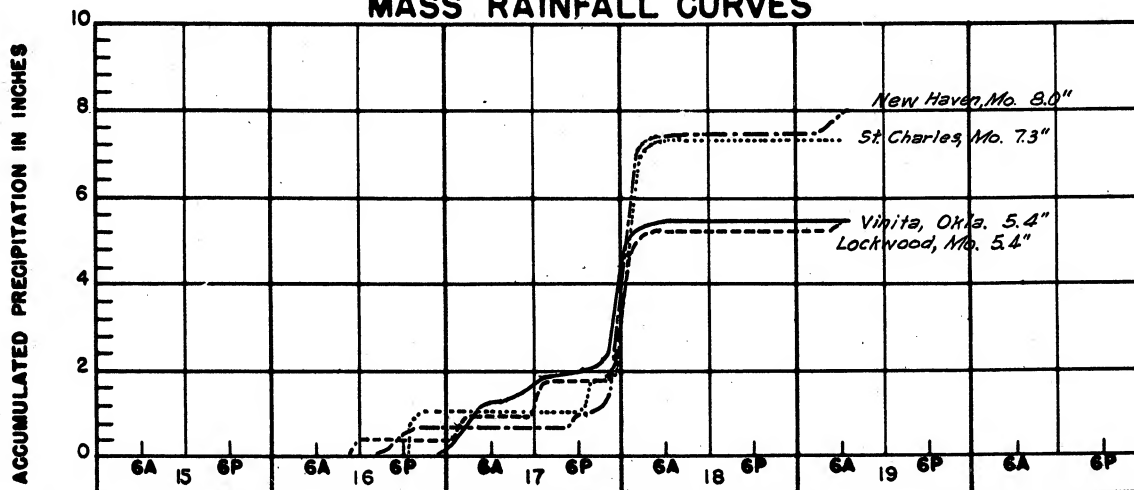
Form S-10 (Data from mass rainfall curves)	3
Form S-11 (Depth-area data from isohyetal map)	2
Form S-12 (Maximum depth-duration data)	16
Maximum duration-depth-area curves	1
Data relating to periods of maximum rainfall	3

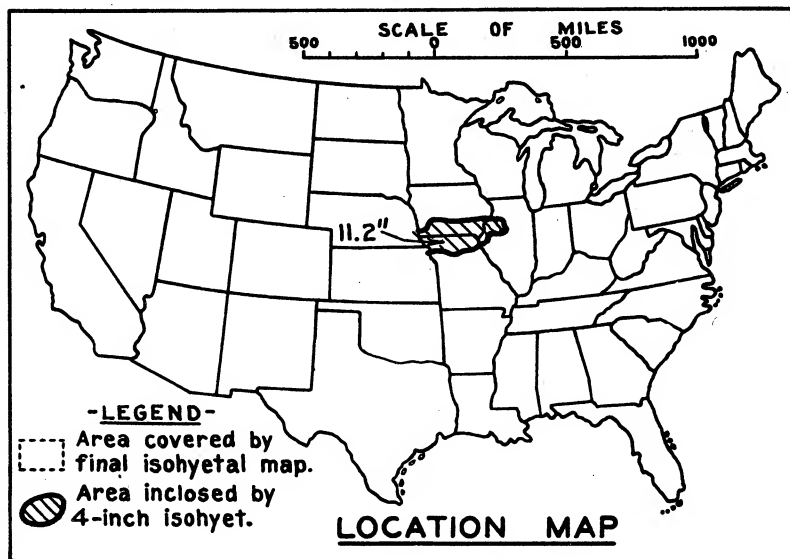
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	69	
10	5.8	6.6	6.8	6.8	6.8	7.2	7.5	7.5	8.0	
100	5.3	6.5	6.8	6.8	6.8	7.0	7.3	7.3	7.7	
200	5.1	6.5	6.8	6.8	6.8	6.9	7.3	7.3	7.6	
500	4.9	6.4	6.7	6.7	6.7	6.8	7.2	7.2	7.4	
1,000	4.7	6.3	6.6	6.6	6.6	6.7	7.0	7.0	7.2	
2,000	4.5	6.1	6.3	6.3	6.3	6.5	6.8	6.8	6.9	
5,000	3.9	5.4	5.7	5.7	5.7	5.8	6.1	6.1	6.2	
10,000	3.0	4.6	4.8	4.8	4.8	4.9	5.2	5.2	5.3	
20,000	2.3	3.6	3.8	4.0	4.1	4.2	4.4	4.4	4.5	
26,000	2.2	3.3	3.5	3.7	3.9	4.0	4.3	4.3	4.4	

STORM STUDIES - ISOHYETAL MAP

Storm of October 16-19, 1905 Assignment UMV 2-6
Study Prepared by: Rock Island, Ill. District
Upper Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 4-7, 1909.

Assignment UMW 2-8

Location Iowa - Missouri

Study Prepared by:

Upper Mississippi Valley
Division

Rock Island District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2-11-41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4-22-44

Remarks:

Centers at:

Bethany and Sublette, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 11

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 4

Misc. precip. records, meteorological data, etc. Unofficial (Newspapers) 3

Form 5002 (Mass rainfall curves)----- 15

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 3

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 12

Maximum duration-depth-area curves----- 1

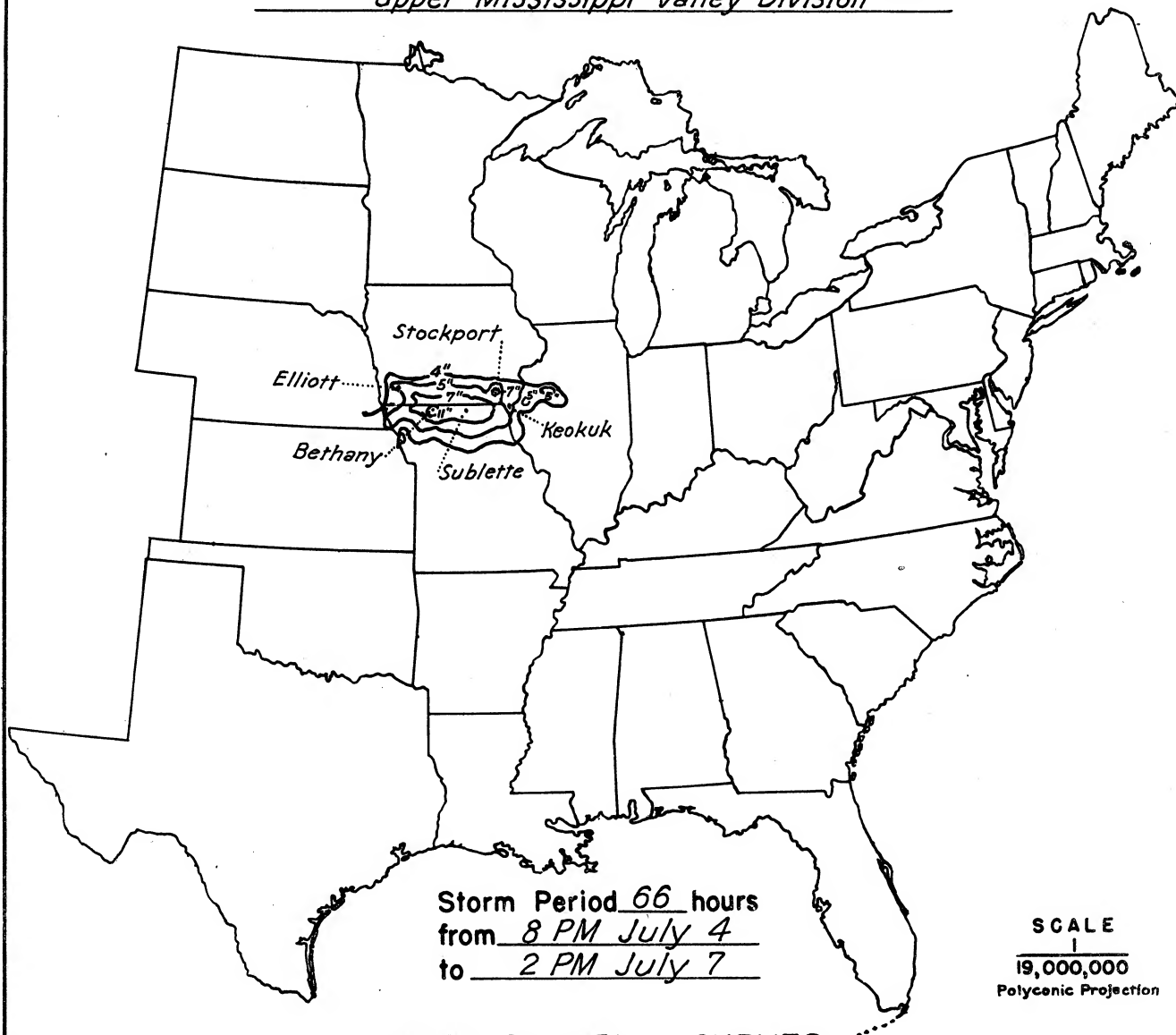
Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

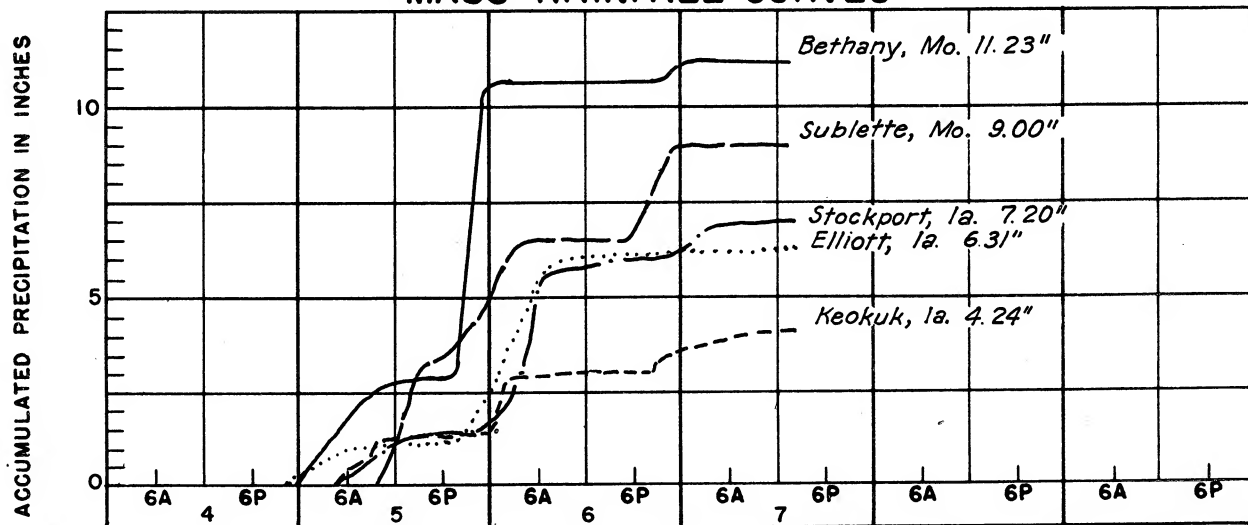
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	66			
10	5.6	7.8	7.9	8.8	10.5	10.7	11.0	11.2			
100	4.7	7.5	7.6	8.4	9.9	10.3	10.5	10.8			
200	4.4	7.3	7.4	8.2	9.7	10.0	10.3	10.6			
500	3.9	6.8	7.0	7.8	9.1	9.4	9.9	10.3			
1,000	3.5	6.2	6.4	7.3	8.5	8.8	9.4	9.9			
2,000	3.0	5.4	5.7	6.6	7.7	8.0	8.7	9.4			
5,000	2.3	4.4	4.6	5.5	6.6	6.8	7.7	8.5			
10,000	1.9	3.5	3.7	4.6	5.6	5.9	6.8	7.6			
20,000	1.3	2.6	2.7	3.6	4.7	4.9	5.5	6.4			
27,000	1.1	2.2	2.4	3.2	4.2	4.5	4.9	5.7			

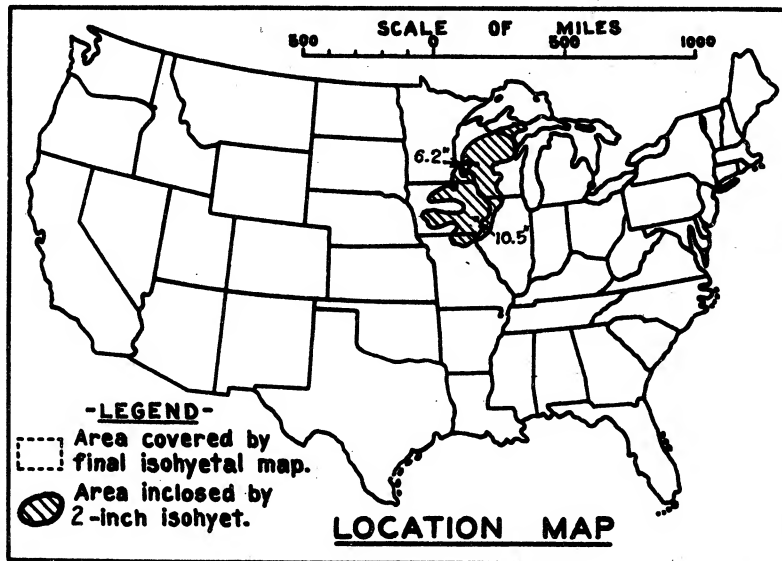
STORM STUDIES - ISOHYETAL MAP

Storm of July 4-7, 1909 Assignment UMV 2-8
Study Prepared by: Rock Island, Ill. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 12 - 15, 1930
 Assignment U M V 2 - 14
 Location Ill. Mo. Ia. Minn. Wis.
 Study Prepared by:
 Upper Mississippi Valley
 Division

Rook Island District

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/24/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/16/45

Remarks: Centers at:

Washington, Ia. and
 Neilsville, Wiso.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	25
Form 5001-B (24-hour " " " ").....	-
Form 5001-D (" " " " " ").....	11
Misc. precip. records, meteorological data, etc.....	17
Form 5002 (Mass rainfall curves).....	34

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

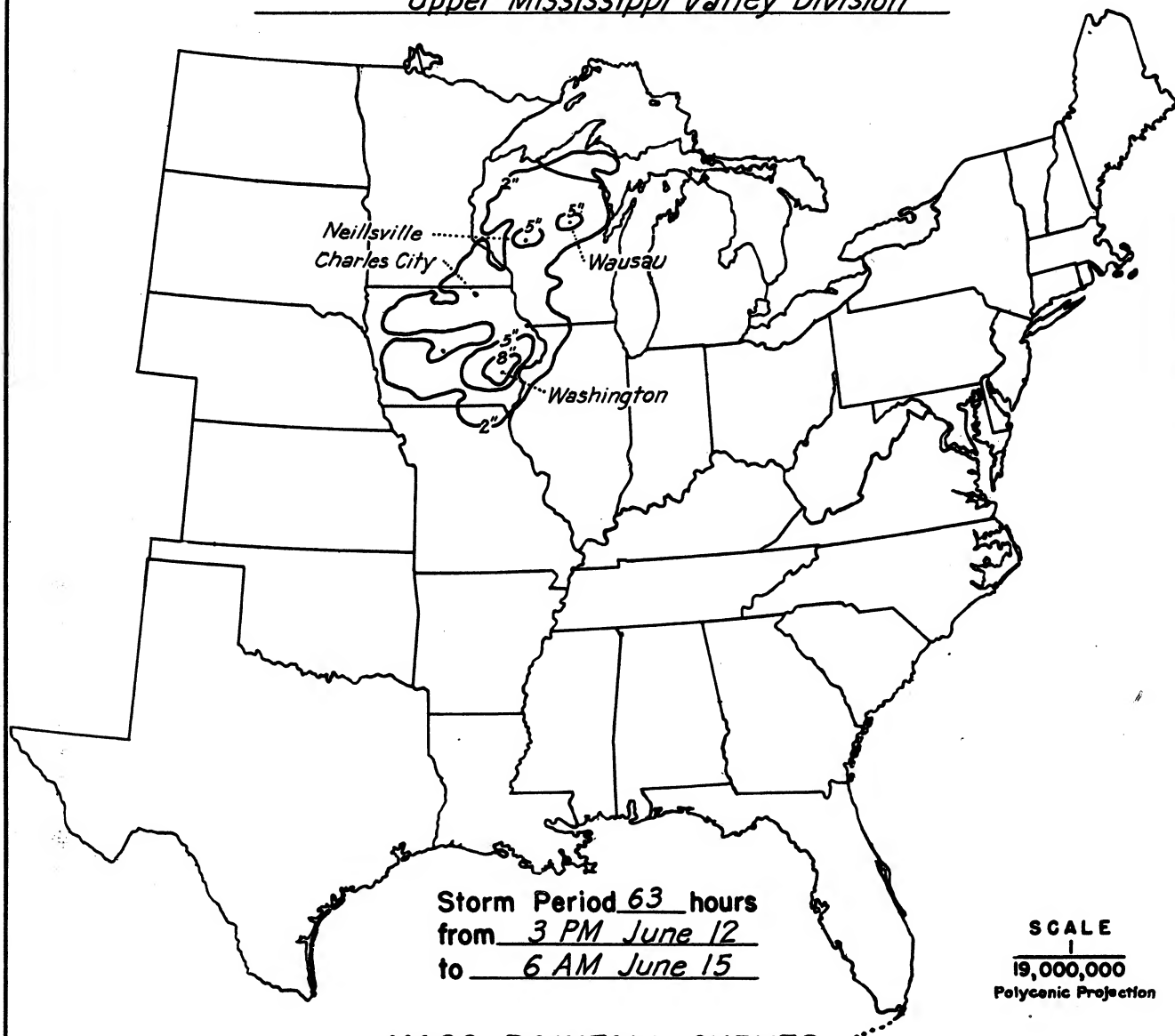
Form S-10 (Data from mass rainfall curves).....	5
Form S-11 (Depth-area data from isohyetal map).....	3
Form S-12 (Maximum depth-duration data).....	18
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

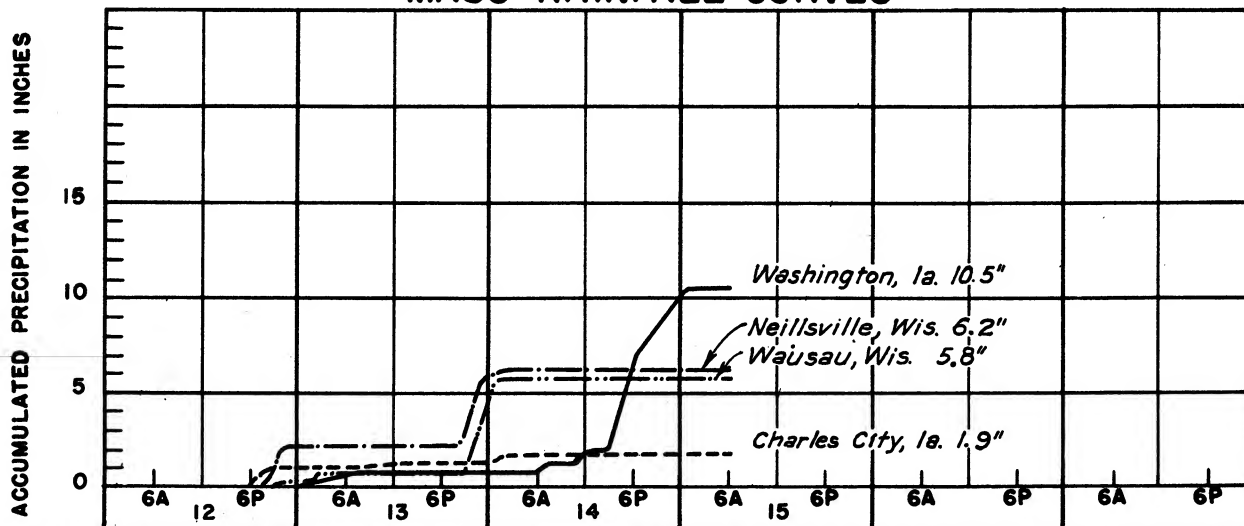
Area in Sq. Mi.	Duration of Rainfall in Hours										
	3	6	9	12	15	18	24	30	36	48	63
10	4.9	6.3	8.0	8.6	9.0	9.1	9.6	9.6	9.6	10.3	10.5
100	4.5	6.0	7.4	7.9	8.4	8.6	9.1	9.2	9.2	9.8	10.1
200	4.3	5.8	7.2	7.6	8.1	8.4	8.7	8.8	8.8	9.5	9.7
500	3.9	5.5	6.7	7.1	7.6	7.9	8.3	8.5	8.5	9.2	9.3
1,000	3.5	4.9	6.1	6.5	6.8	7.2	7.7	7.8	7.8	8.5	8.6
2,000	3.0	4.2	5.3	5.7	6.0	6.4	7.0	7.2	7.2	7.7	7.8
5,000	2.3	3.3	4.2	4.6	4.8	5.2	5.9	6.1	6.1	6.5	6.7
10,000	1.7	2.6	3.4	3.7	3.9	4.2	4.9	5.1	5.1	5.5	5.8
20,000	1.2	1.8	2.5	2.8	2.9	3.2	3.8	4.0	4.0	4.5	4.9
50,000	0.5	0.9	1.3	1.5	1.6	1.8	2.2	2.5	2.7	3.1	3.7
70,000	0.3	0.6	0.9	1.0	1.1	1.3	1.6	2.0	2.2	2.6	3.3

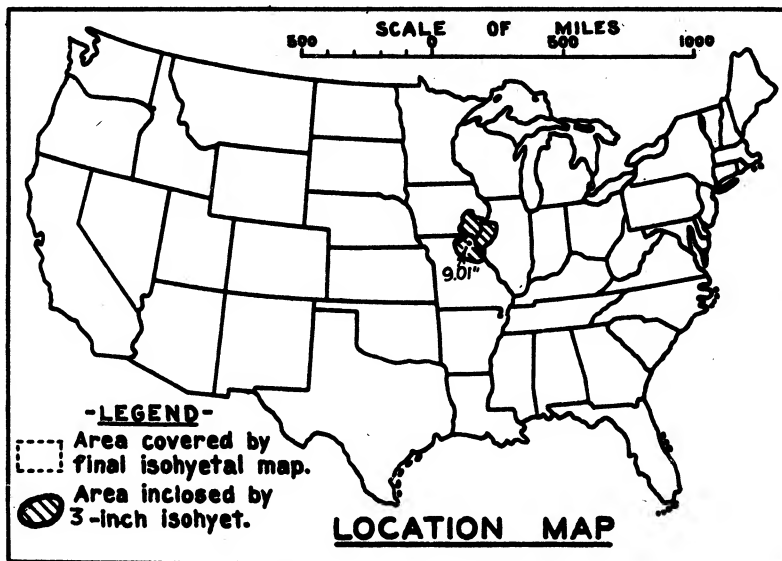
STORM STUDIES - ISOHYETAL MAP

Storm of June 12-15, 1930 Assignment UMV 2-14
Study Prepared by: Rock Island, Ill. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 28 - 29, 1933

Assignment U M V 2 - 15

Location Ia., Ill., & Mo.

Study Prepared by:

Upper Mississippi Valley
Division

Rock Island District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/5/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/20/44Remarks: Centers at
Gorin, Mo. and
Burlington, Ia.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	4
Form 5002 (Mass rainfall curves)-----	9

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

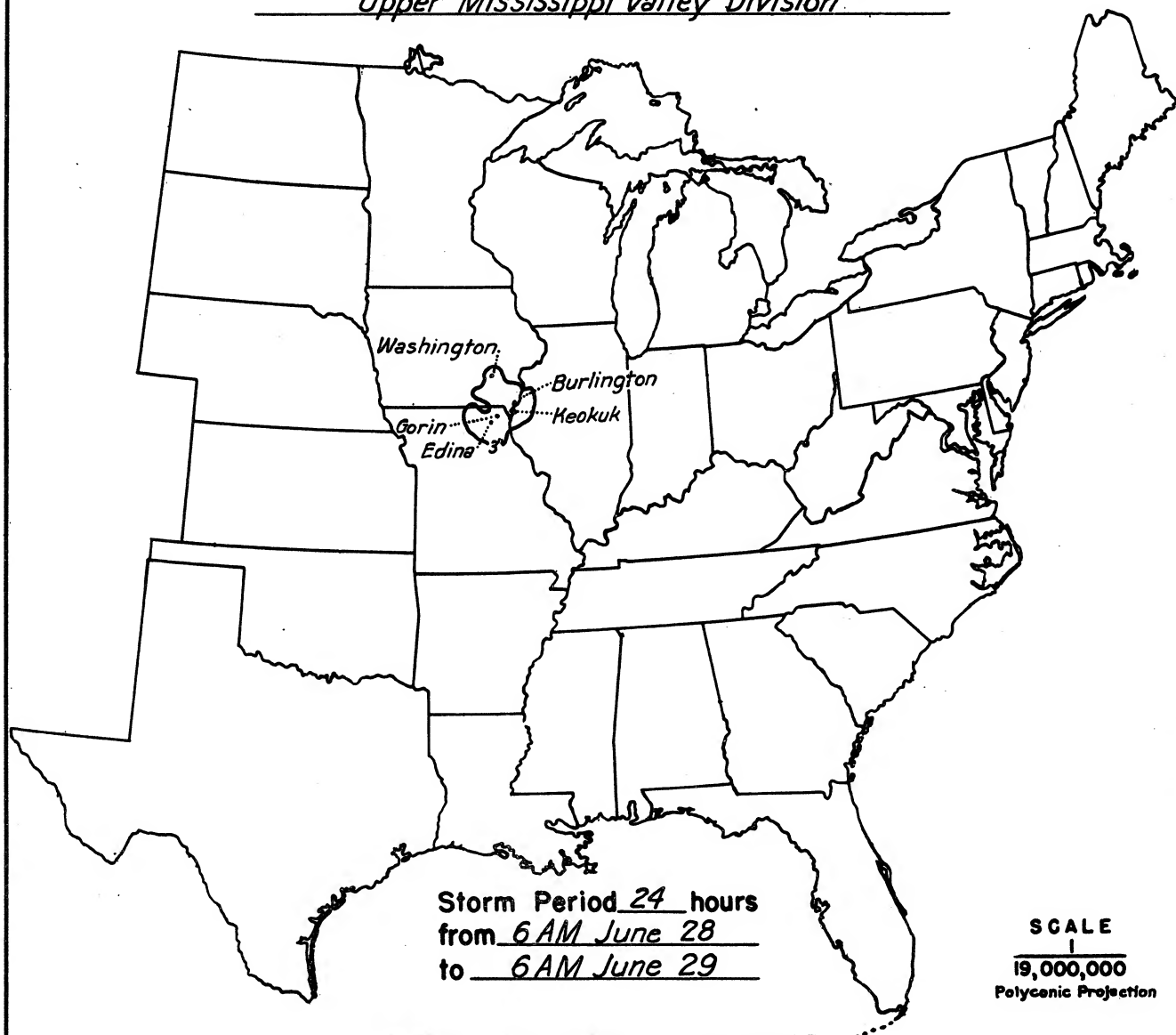
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

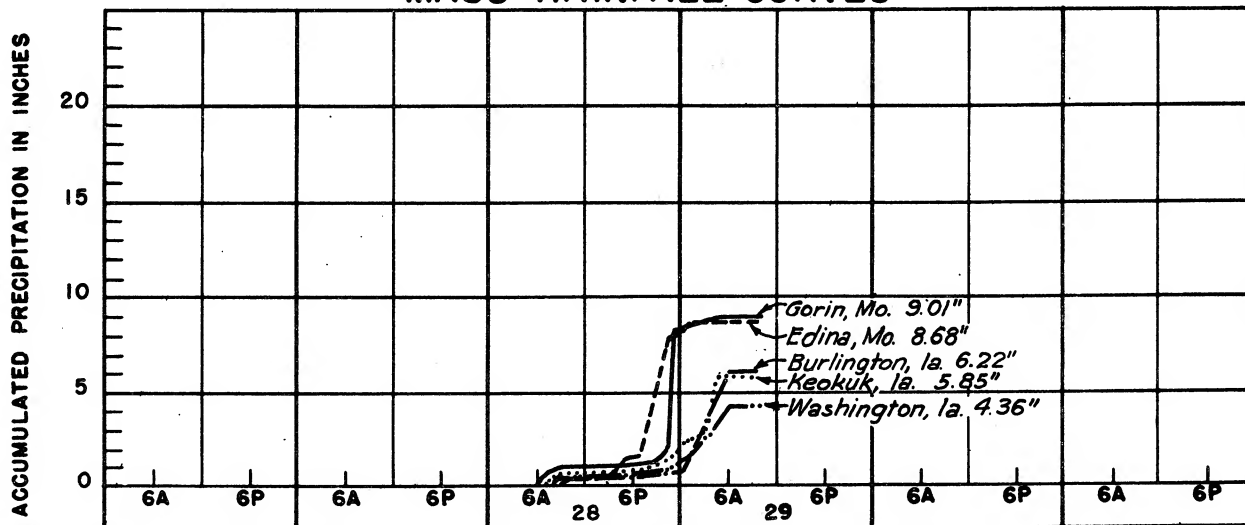
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

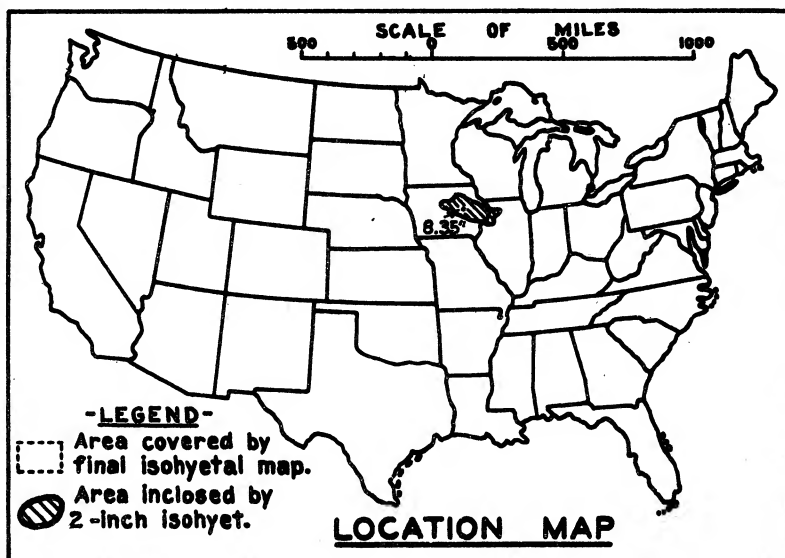
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24						
10	7.5	8.2	8.4	9.0						
100	6.6	7.7	8.0	8.9						
200	6.2	7.4	7.8	8.8						
500	5.7	7.1	7.4	8.5						
1,000	5.3	6.7	7.0	8.1						
2,000	4.6	6.2	6.4	7.4						
5,000	3.4	5.1	5.2	6.2						
10,000	2.3	3.8	4.0	5.0						
13,000	1.9	3.2	3.4	4.4						

STORM STUDIES - ISOHYETAL MAP

Storm of June 28-29, 1933 Assignment UMV 2-15Study Prepared by: Rock Island, Ill. DistrictUpper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 1-2, 1929

Assignment U M V 2 - 17

Location Iowa

Study Prepared by:

Upper Mississippi Valley
Division

Rock Island District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5/25/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/15/44Remarks: Centers at
Toledo, Iowa and
Tipton, Iowa**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	8
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	3
Misc. precip. records, meteorological data, etc.....	1
Form 5002 (Mass rainfall curves).....	8

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

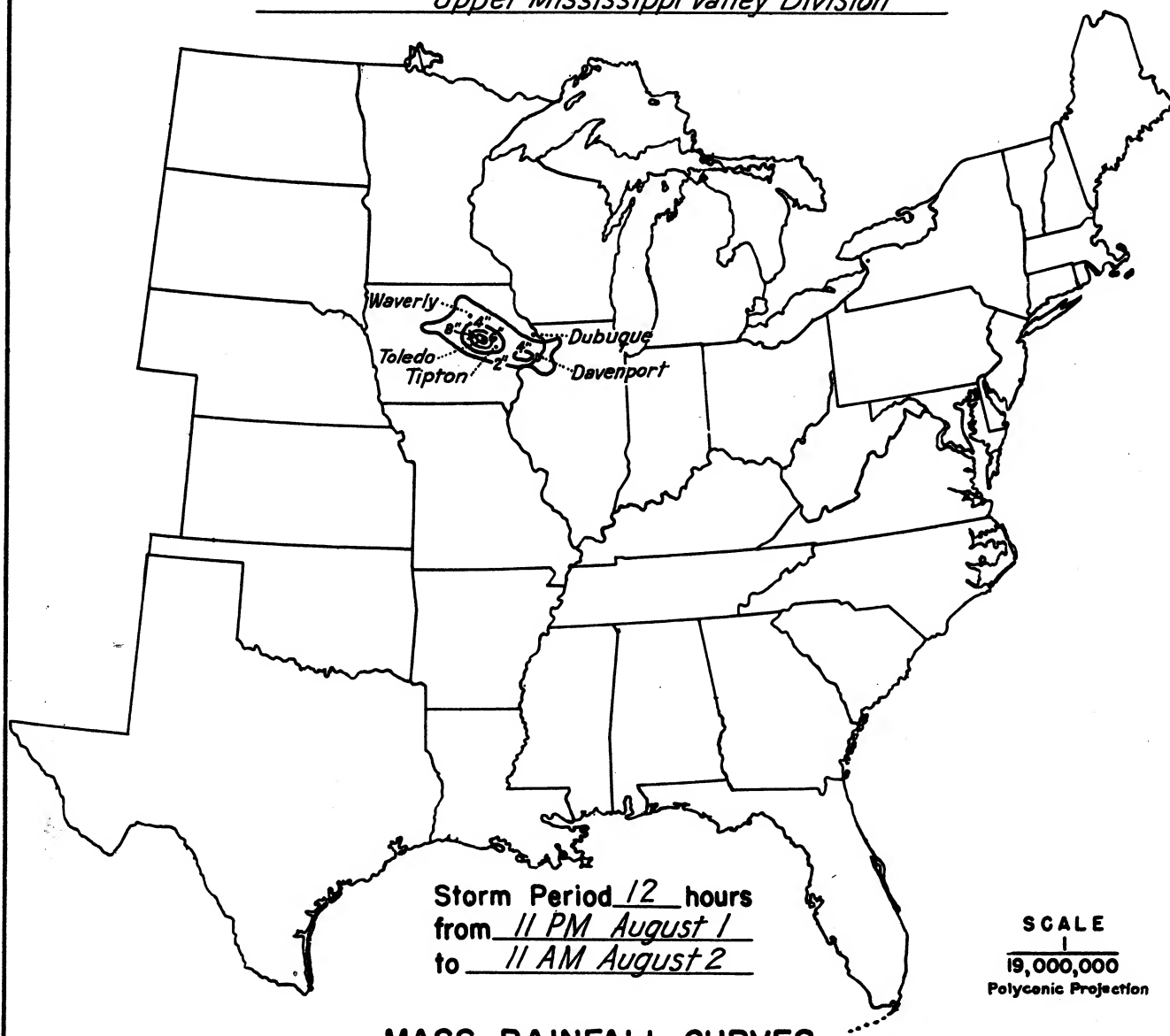
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	5
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

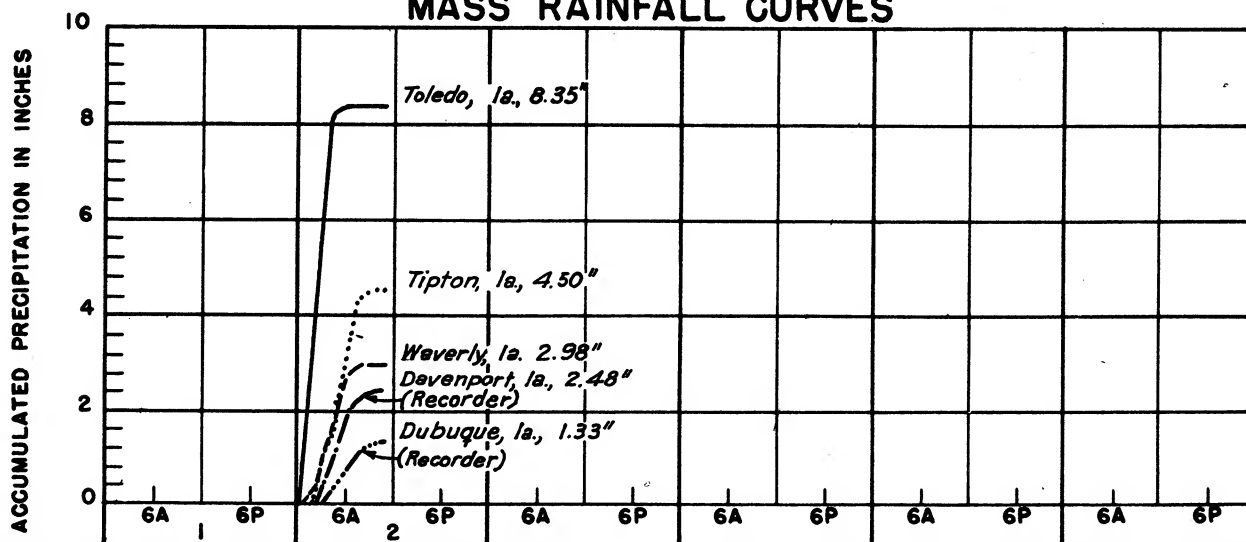
Area in Sq. Mi.	Duration of Rainfall in Hours								
	1	2	3	4	5	6	8	12	
10	2.2	4.4	6.5	8.1	8.2	8.3	8.4	8.4	
100	2.1	4.2	6.0	7.2	7.6	7.7	7.8	7.8	
200	2.0	4.1	5.7	6.8	7.2	7.4	7.5	7.5	
500	1.9	3.8	5.1	6.1	6.5	6.7	6.8	6.8	
1,000	1.7	3.4	4.6	5.5	5.8	6.0	6.1	6.1	
2,000	1.5	2.9	3.9	4.7	5.0	5.2	5.4	5.4	
5,000	1.2	2.2	3.0	3.6	3.9	4.1	4.2	4.3	
10,000	0.9	1.6	2.3	2.7	3.1	3.2	3.3	3.4	
15,000	0.7	1.3	1.9	2.2	2.5	2.7	2.8	2.9	

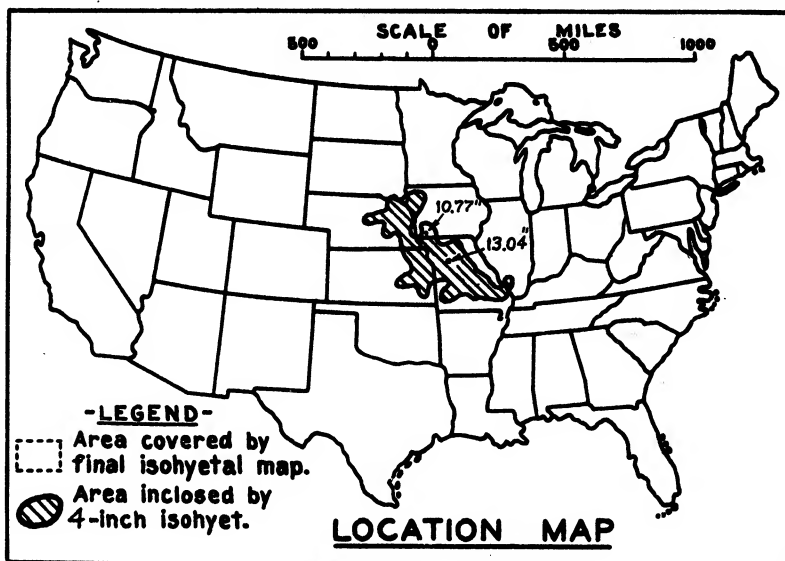
STORM STUDIES - ISOHYETAL MAP

Storm of August 1-2, 1929 Assignment UMV 2-17
Study Prepared by: Rock Island Ill., District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 12-19, 1905
 Assignment U M V 2 -18
 Location Ill., Ia., Kan., Minn.,
 Study Prepared by: Mo., Neb.,
 Wis., & S.D.

Upper Mississippi Valley
 Division

Rock Island District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 1/12/44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/30/45

Remarks: Centers at
 Boonville, Mo., Thurman, Ia.
 and Blue Springs, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 31
 Form 5001-B (24-hour " ")----- 41
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- 22
 Form 5002 (Mass rainfall curves)----- 88

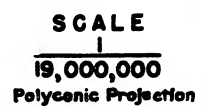
PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 5
 Form S-11 (Depth-area data from isohyetal map)----- 4
 Form S-12 (Maximum depth-duration data)----- 33
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 4

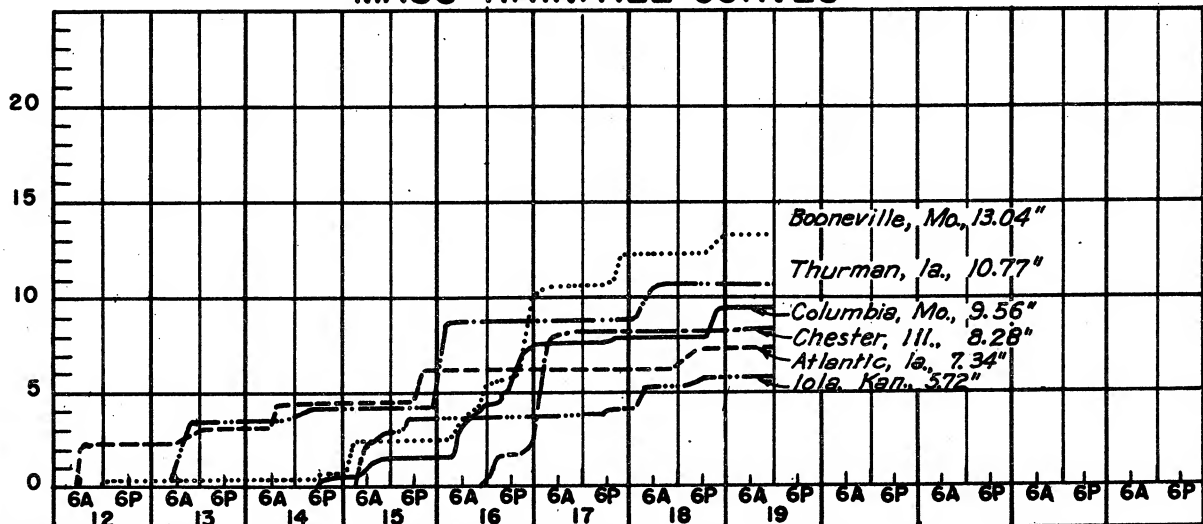
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

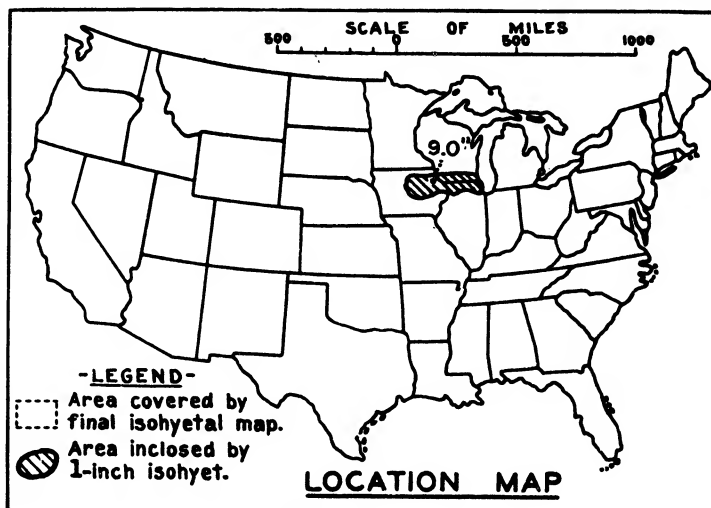
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	72	90	120	180
10	6.1	6.5	7.9	8.1	8.2	8.2	9.9	11.9	12.2	13.0	13.0
100	5.5	5.9	7.2	7.7	8.0	8.1	9.6	11.5	11.9	12.6	12.7
200	5.3	5.7	7.0	7.5	7.9	8.0	9.5	11.4	11.8	12.5	12.6
500	5.0	5.4	6.6	7.2	7.8	7.9	8.9	11.0	11.3	12.1	12.2
1,000	4.5	5.1	6.3	6.9	7.6	7.7	8.3	10.5	10.8	11.7	11.8
2,000	4.0	4.3	5.8	6.6	7.4	7.5	7.8	9.9	10.1	11.2	11.3
5,000	3.2	4.2	5.0	5.9	6.8	6.9	7.0	8.9	9.2	10.3	10.4
10,000	2.6	3.6	4.3	5.2	6.0	6.1	6.1	7.8	8.2	9.3	9.5
20,000	1.9	2.8	3.4	4.3	5.0	5.1	5.1	6.4	7.2	8.1	8.5
50,000	1.1	1.6	2.0	2.5	3.2	3.4	3.5	4.7	5.6	6.4	6.9
70,000	0.8	1.1	1.4	1.8	2.4	2.6	2.9	4.1	4.7	5.7	6.2

Storm of September 12-19, 1905 Assignment UMV 2-18
Study Prepared by: Rock Island, Ill. District
Upper Mississippi Valley Division



ACCUMULATED PRECIPITATION IN INCHES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 25-26 July 1940
 Assignment UMW 2-22
 Location Iowa, Wisc. & Ill.
 Study Prepared by:
 North Central Division
 Rock Island District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/10/50
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/15/57

Remarks:
 Center at Gunder, Iowa
 Dewpoint 72° Ref. Pt.
 160 SSW

DATA AND COMPUTATIONS COMPILED Grid D-13**PART I**

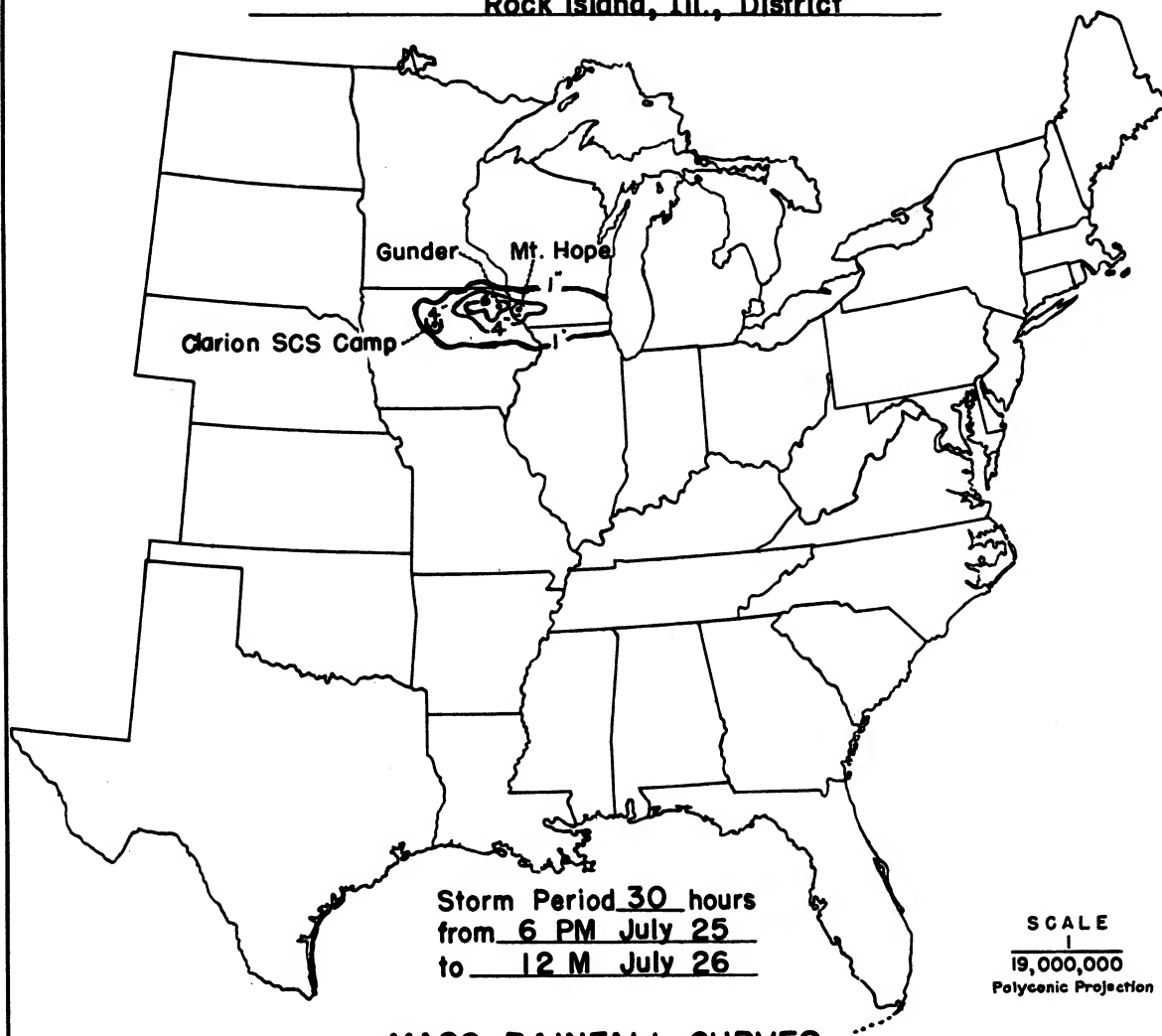
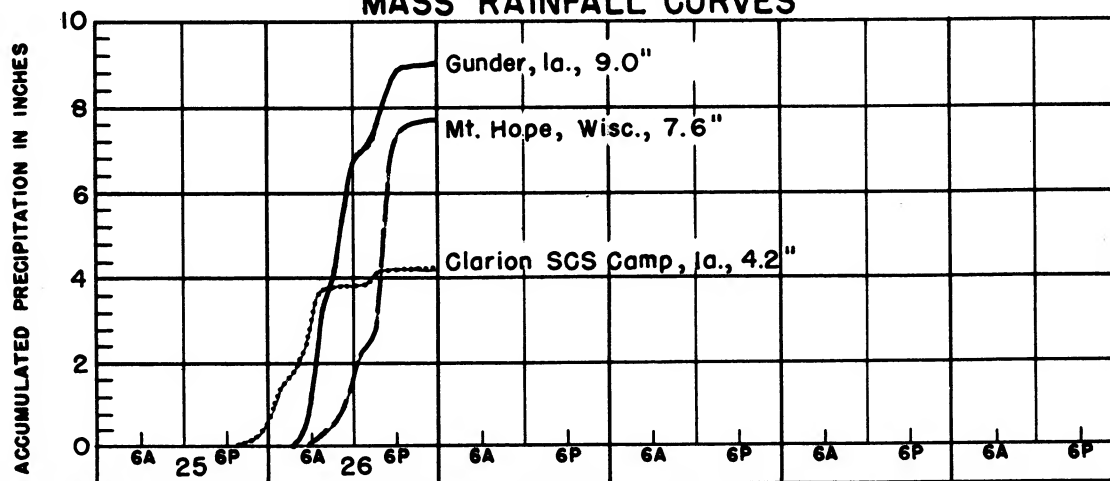
Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 40
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 13
 Misc. precip. records, meteorological data, etc.----- 1
 Form 5002 (Mass rainfall curves)----- 45

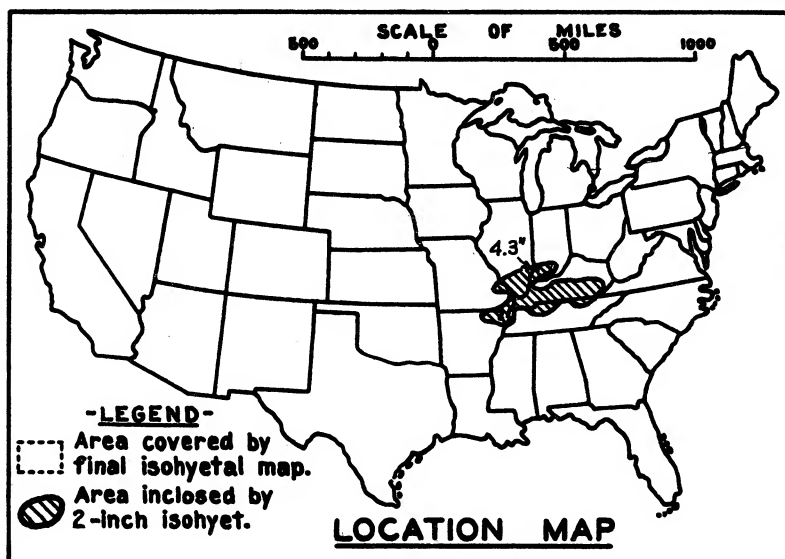
PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 4
 Form S-11 (Depth-area data from isohyetal map)----- 2
 Form S-12 (Maximum depth-duration data)----- 10
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30							
10	7.3	8.4	9.0	9.0	9.0							
100	4.9	7.1	8.8	8.8	8.8							
200	4.7	6.7	8.5	8.5	8.5							
500	4.2	5.8	7.7	7.7	7.7							
1000	3.6	5.4	7.2	7.2	7.2							
2000	2.9	4.7	6.4	6.4	6.4							
5000	2.2	3.9	5.3	5.4	5.4							
10000	1.6	3.0	4.2	4.3	4.4							
20000	1.1	2.0	3.0	3.1	3.2							
23400	1.0	1.8	2.7	2.8	2.9							

STORM STUDIES - ISOHYETAL MAPStorm of 25-26 July 1940 Assignment UMV 2-22Study Prepared by: North Central DivisionRock Island, Ill., District**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of January 4 - 5, 1917
 Assignment U M V 3 - 3
 Location Ark. Ky. Ind. Mo. Ill.
 Study Prepared by: Tenn.

Upper Mississippi Valley
 Division

St. Louis District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2/14/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/27/45

Remarks: Centers at:
 Russellville, Ky. and
 Vincennes, Ind.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	19
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	22
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	51

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

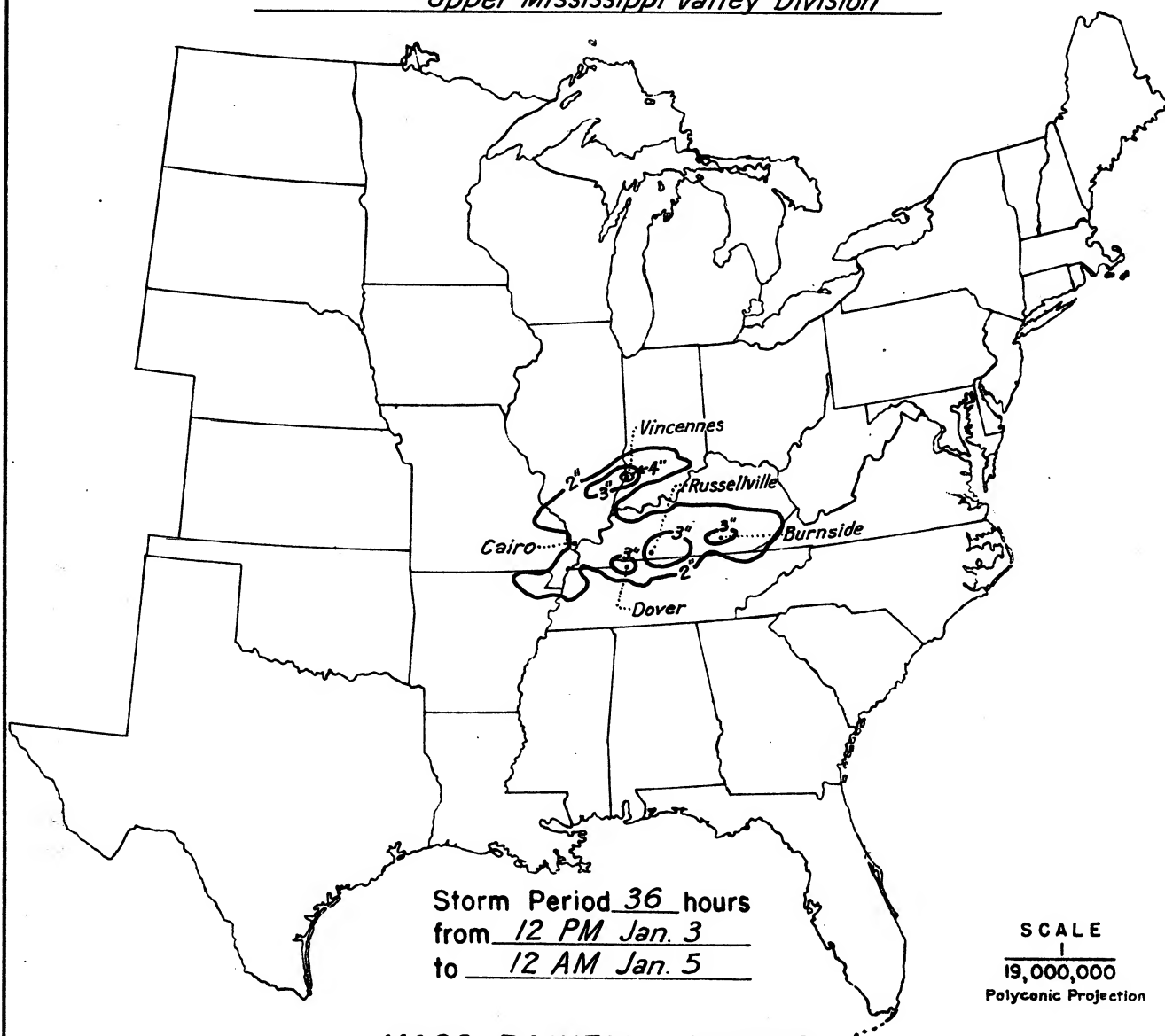
Form S-10 (Data from mass rainfall curves).....	3
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	5
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

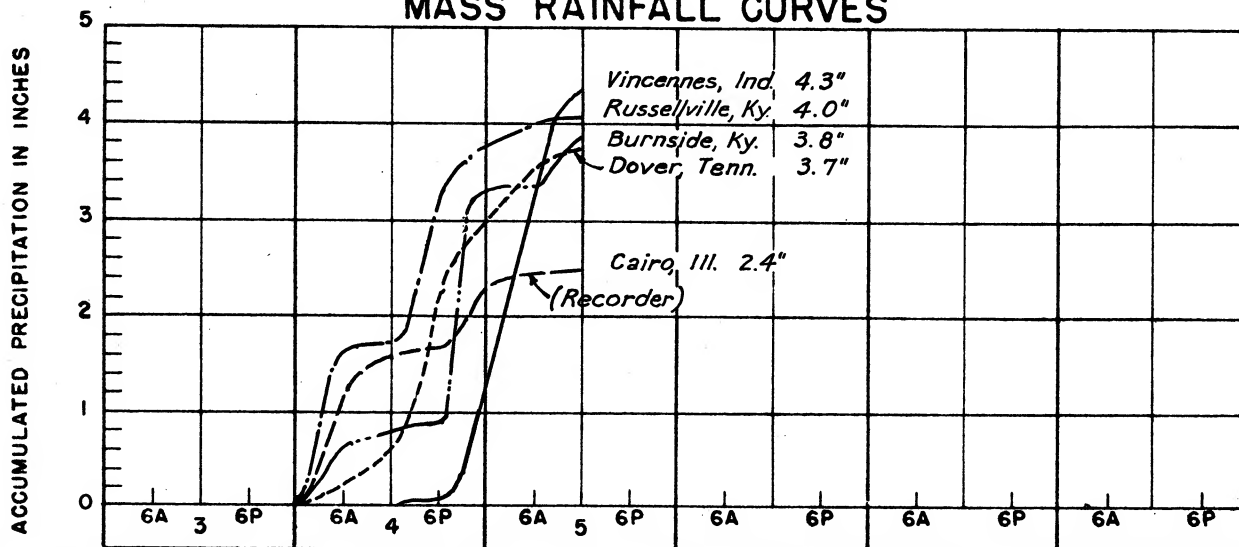
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36				
10	3.3	3.6	4.2	4.3	4.3	4.3				
50	3.1	3.5	4.1	4.2	4.2	4.2				
100	2.9	3.4	4.0	4.1	4.1	4.1				
200	2.8	3.3	3.9	4.0	4.0	4.0				
500	2.7	3.2	3.8	3.8	3.9	3.9				
1,000	2.6	3.1	3.6	3.7	3.7	3.8				
2,000	2.4	3.0	3.3	3.5	3.6	3.7				
5,000	2.1	2.7	2.9	3.2	3.4	3.5				
10,000	1.8	2.3	2.6	2.9	3.2	3.3				
20,000	1.5	2.0	2.3	2.5	3.0	3.1				
50,000	1.1	1.6	1.8	2.1	2.6	2.8				
60,000	1.0	1.5	1.7	2.0	2.5	2.7				

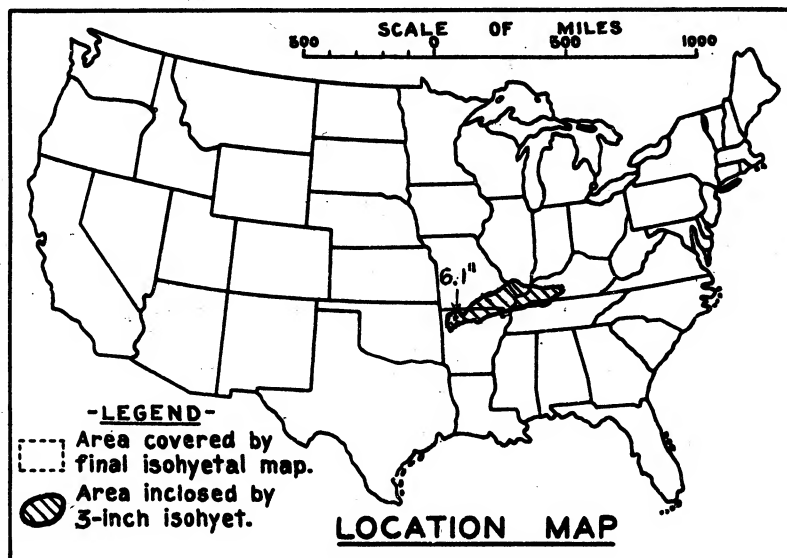
STORM STUDIES - ISOHYETAL MAP

Storm of January 4-5, 1917 Assignment UMV 3-3
Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Mar. 31 - Apr. 2, 1917
 Assignment U M V 3 - 4
 Location Ark. Mo. Ill. Ky. Ten.
 Study Prepared by:

Upper Mississippi Valley
 Division

St. Louis District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/22/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 6/16/45

Remarks: Centers at;
 Dutton, Ark. and
 Koshkonong, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	15
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	7
Miscl. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	18

PART II

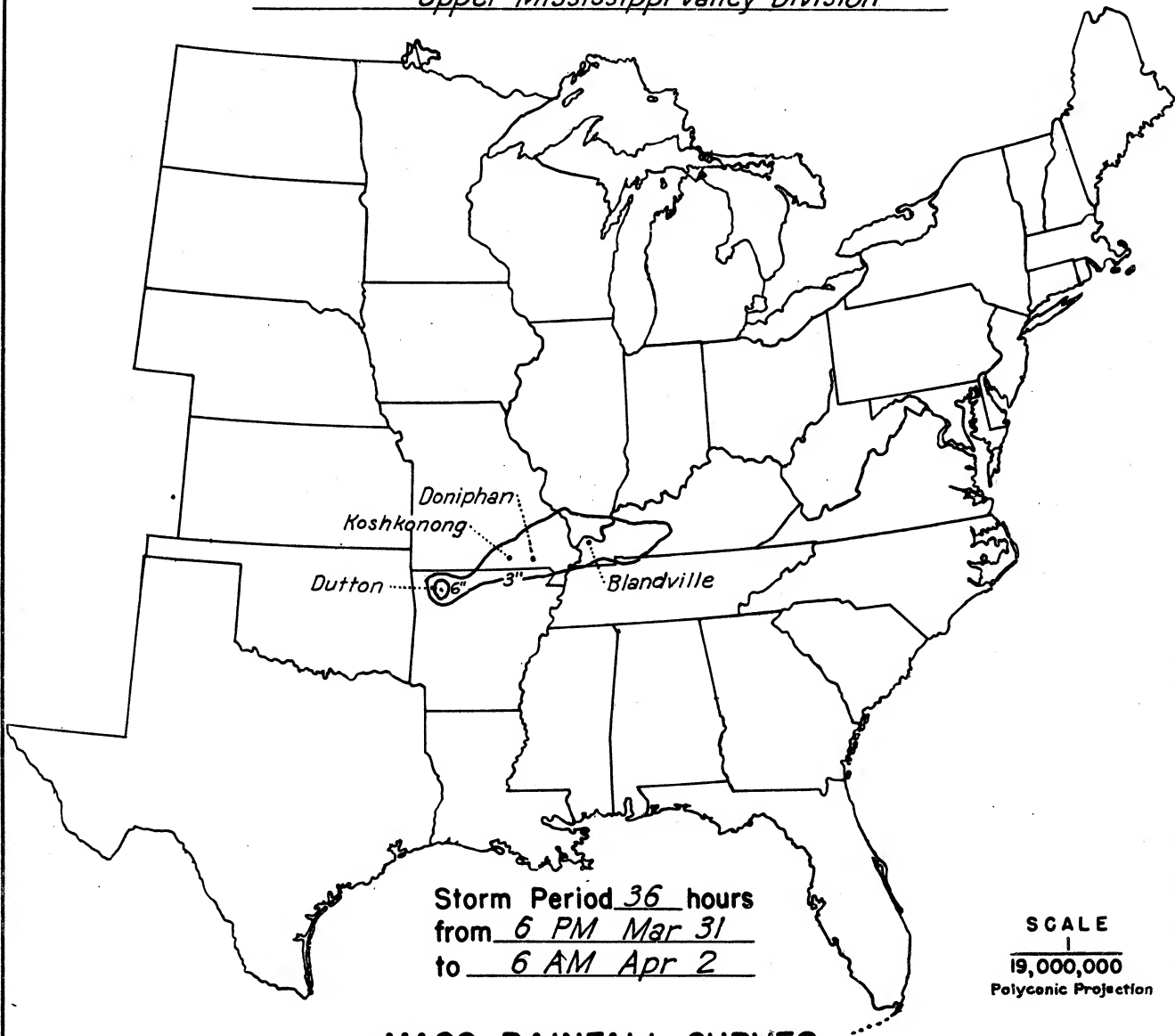
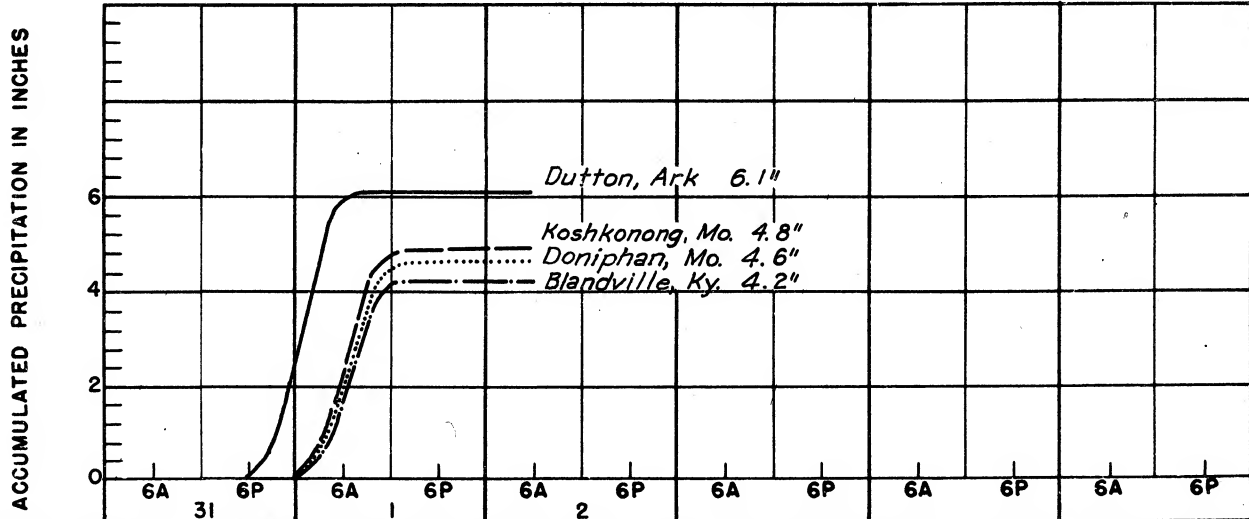
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

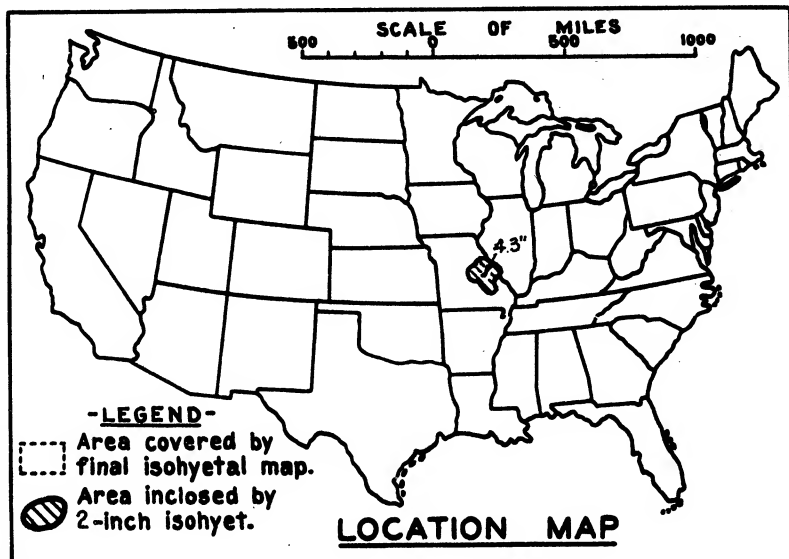
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36				
Max. Station	3.8	6.1	6.1	6.1	6.1	6.1				
10	3.7	6.0	6.0	6.0	6.0	6.0				
100	3.5	5.7	5.8	5.8	5.8	5.8				
200	3.4	5.6	5.6	5.6	5.6	5.6				
500	3.3	5.3	5.4	5.4	5.4	5.4				
1,000	3.1	4.9	5.1	5.2	5.2	5.2				
2,000	2.8	4.5	4.8	4.8	4.9	5.0				
5,000	2.5	4.0	4.3	4.4	4.4	4.5				
10,000	2.1	3.5	3.8	4.0	4.0	4.2				
20,000	1.8	3.1	3.4	3.6	3.7	3.8				
30,000	1.6	2.8	3.1	3.3	3.4	3.6				

STORM STUDIES - ISOHYETAL MAPStorm of March 31 - April 2, 1917 Assignment UMV 3-4Study Prepared by: St Louis, Mo. District
Upper Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of May 22-23, 1918
 Assignment U M V 3 - 5
 Location Missouri, Illinois
 Study Prepared by:
 Upper Mississippi Valley
 Division
 St. Louis District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8-26-41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10-1-45
 Remarks:
 Center at
 Warrenton, Missouri

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	1
Misc. precip. records, meteorological data, etc.-----	6
Form 5002 (Mass rainfall curves)-----	3

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

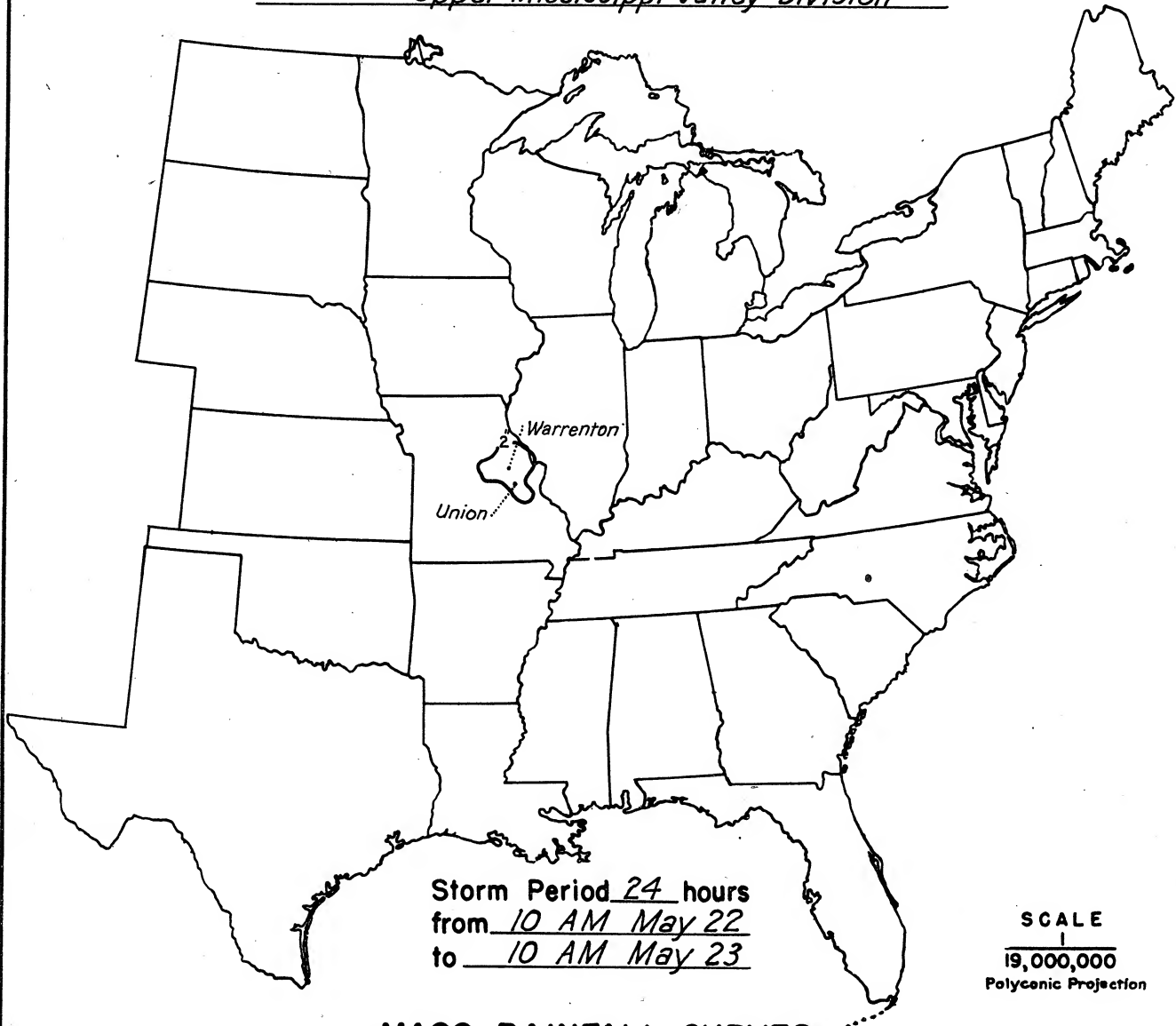
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	1
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

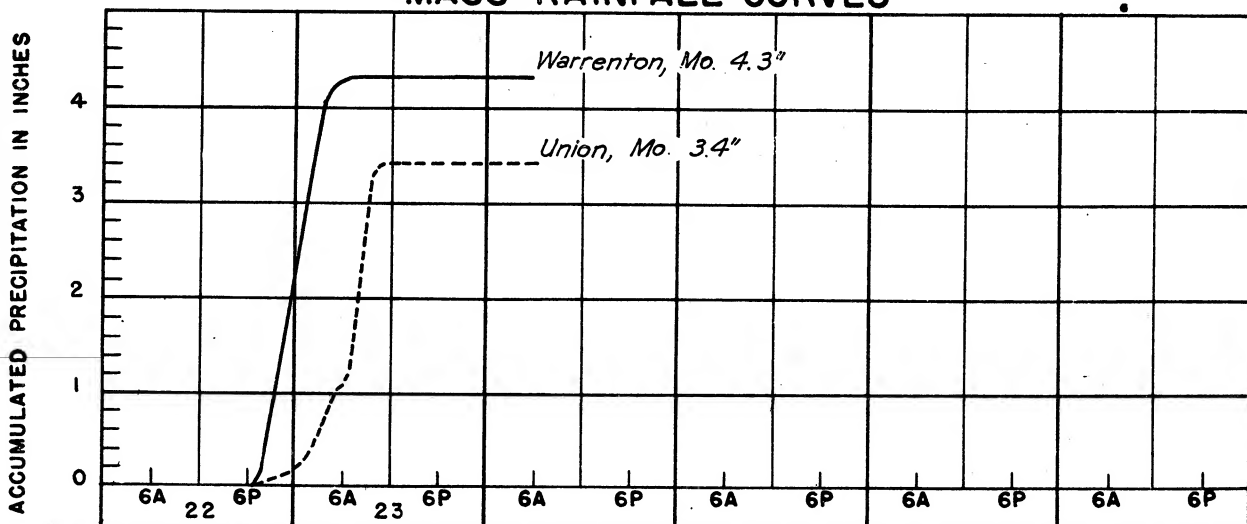
Area in Sq. Mi.	Duration of Rainfall in Hours										
	3	6	9	12	15	18	21	24			
10	2.2	3.8	4.2	4.3	4.3	4.3	4.3	4.3			
20	2.1	3.6	4.1	4.2	4.2	4.2	4.2	4.2			
50	1.9	3.4	3.9	4.1	4.1	4.1	4.1	4.1			
100	1.8	3.2	3.8	4.0	4.0	4.0	4.0	4.0			
200	1.7	2.9	3.5	3.8	3.9	3.9	3.9	3.9			
500	1.6	2.6	3.1	3.4	3.7	3.7	3.7	3.7			
1,000	1.5	2.4	2.8	3.1	3.5	3.5	3.5	3.5			
2,000	1.3	2.1	2.5	2.7	3.1	3.1	3.2	3.2			
5,000	1.2	1.7	2.0	2.1	2.5	2.5	2.6	2.7			

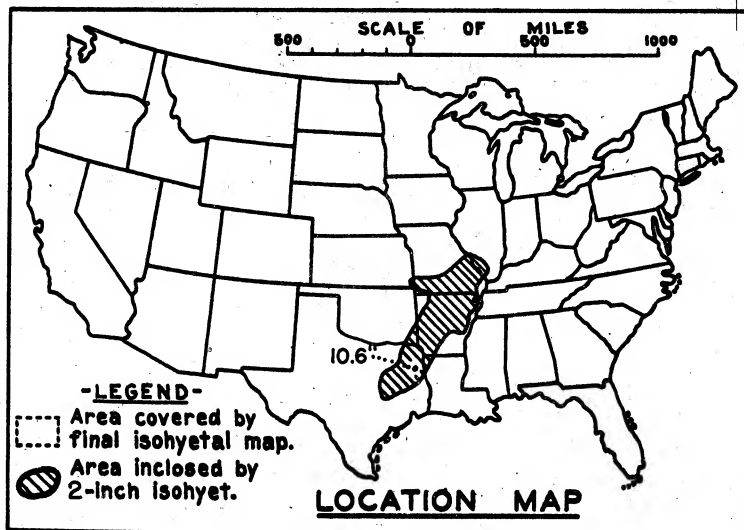
STORM STUDIES - ISOHYETAL MAP

Storm of May 22-23, 1918 Assignment UMV 3-5
Study Prepared by: St. Louis, Mo District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 25-26 April 1921

Assignment UMV 3-8

Location Ill., Mo., Kans., Ark.,

Study Prepared by: Okla., Tex.

Upper Mississippi Valley

Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6-12-45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11-28-45Remarks: Center at
Marshall, Texas**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	9
Form 5001-B (24-hour " ").....	"
Form 5001-D (" " " ").....	6
Misc. precip. records, meteorological data, etc.....	10
Form 5002 (Mass rainfall curves).....	20

PART II

Final isohyetal maps, in 1 sheets, scale 1:1,000,000

Data and computation sheets:

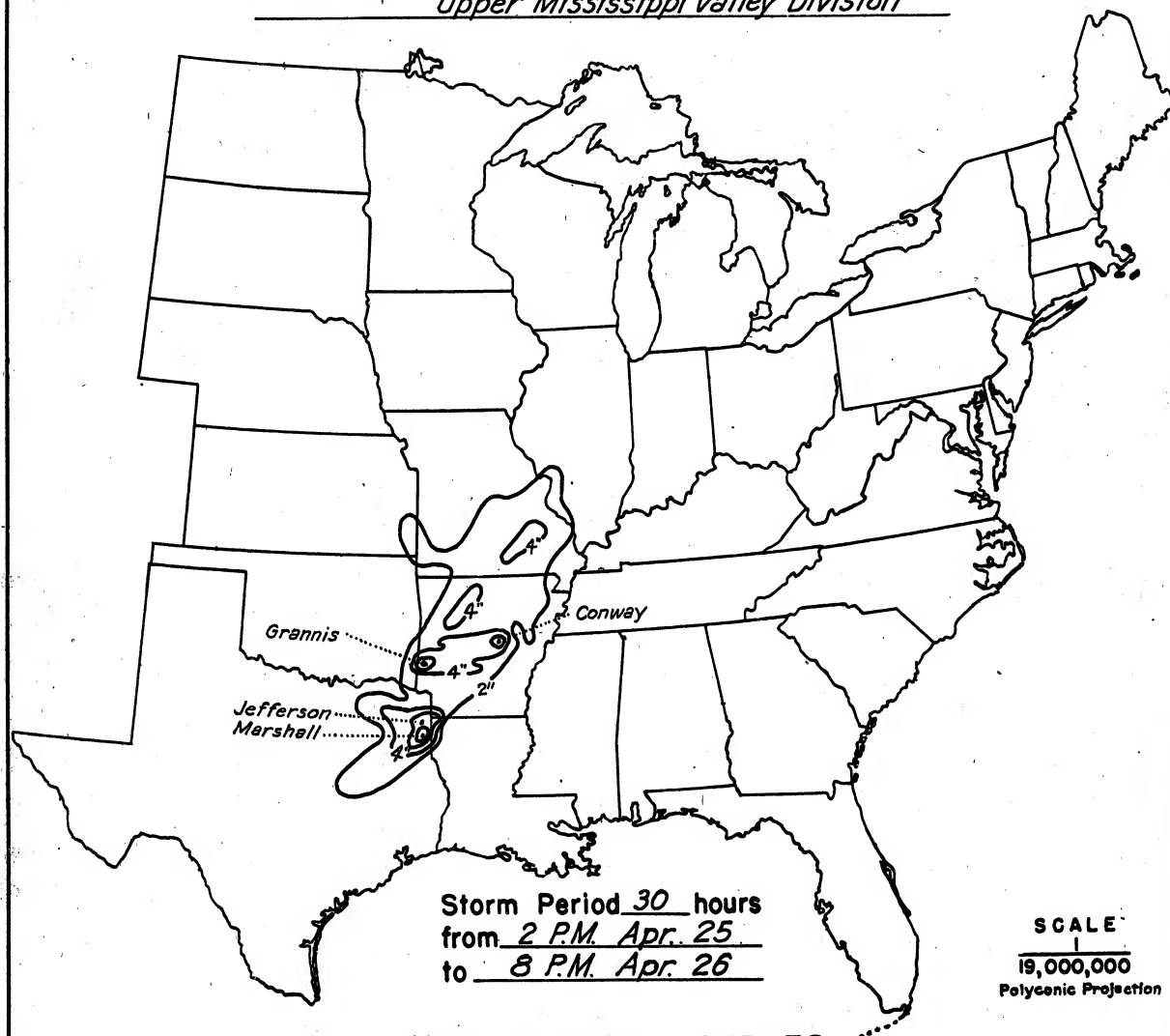
Form S-10 (Data from mass rainfall curves).....	3
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	19
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

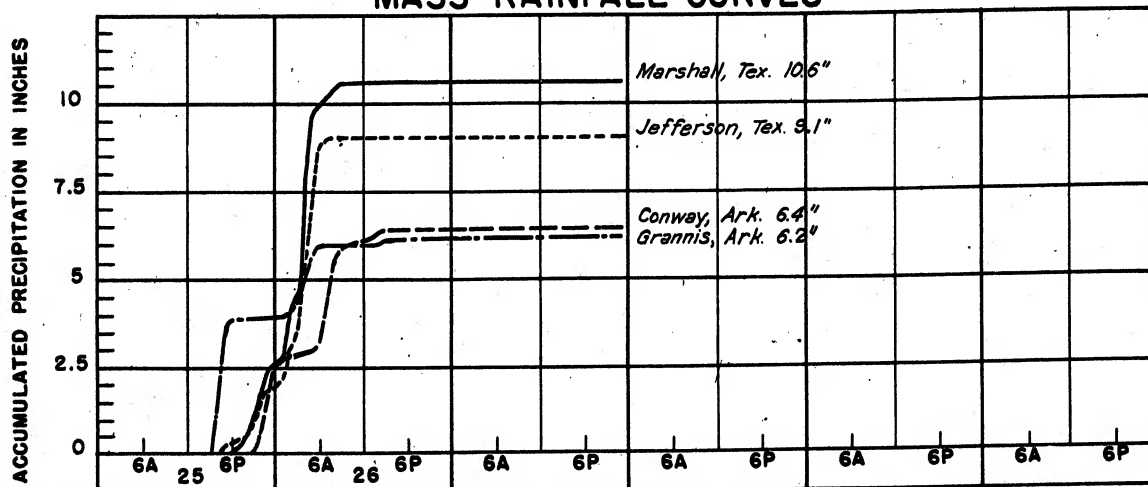
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30					
10	7.3	10.0	10.6	10.6	10.6					
100	6.8	9.1	9.8	9.8	9.8					
200	6.7	8.9	9.5	9.5	9.5					
500	6.4	8.4	8.9	9.0	9.0					
1000	6.0	7.8	8.3	8.4	8.4					
2,000	5.3	6.9	7.3	7.4	7.4					
5,000	3.6	5.1	5.7	6.0	6.1					
10,000	2.7	3.9	4.5	5.1	5.2					
20,000	2.0	3.1	3.7	4.3	4.4					
50,000	1.4	2.3	3.2	3.5	3.6					
75,000	1.2	2.0	2.9	3.3	3.4					

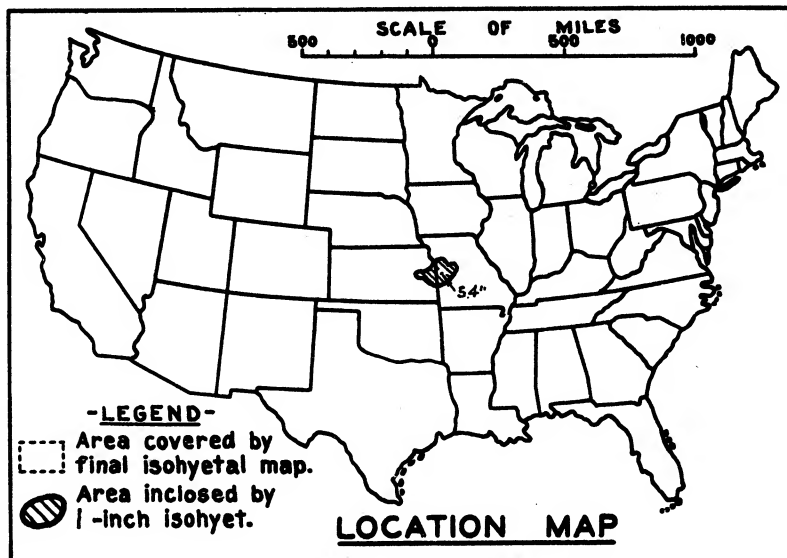
STORM STUDIES - ISOHYETAL MAP

Storm of April 25-26, 1921 Assignment UMV 3-8
Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 2-3, 1922

Assignment U M V 3 - 9 A

Location Missouri, Kansas

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8-26-41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10-2-45

Remarks:

Center at

Harrisonville, Missouri

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	1
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	1
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	2

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

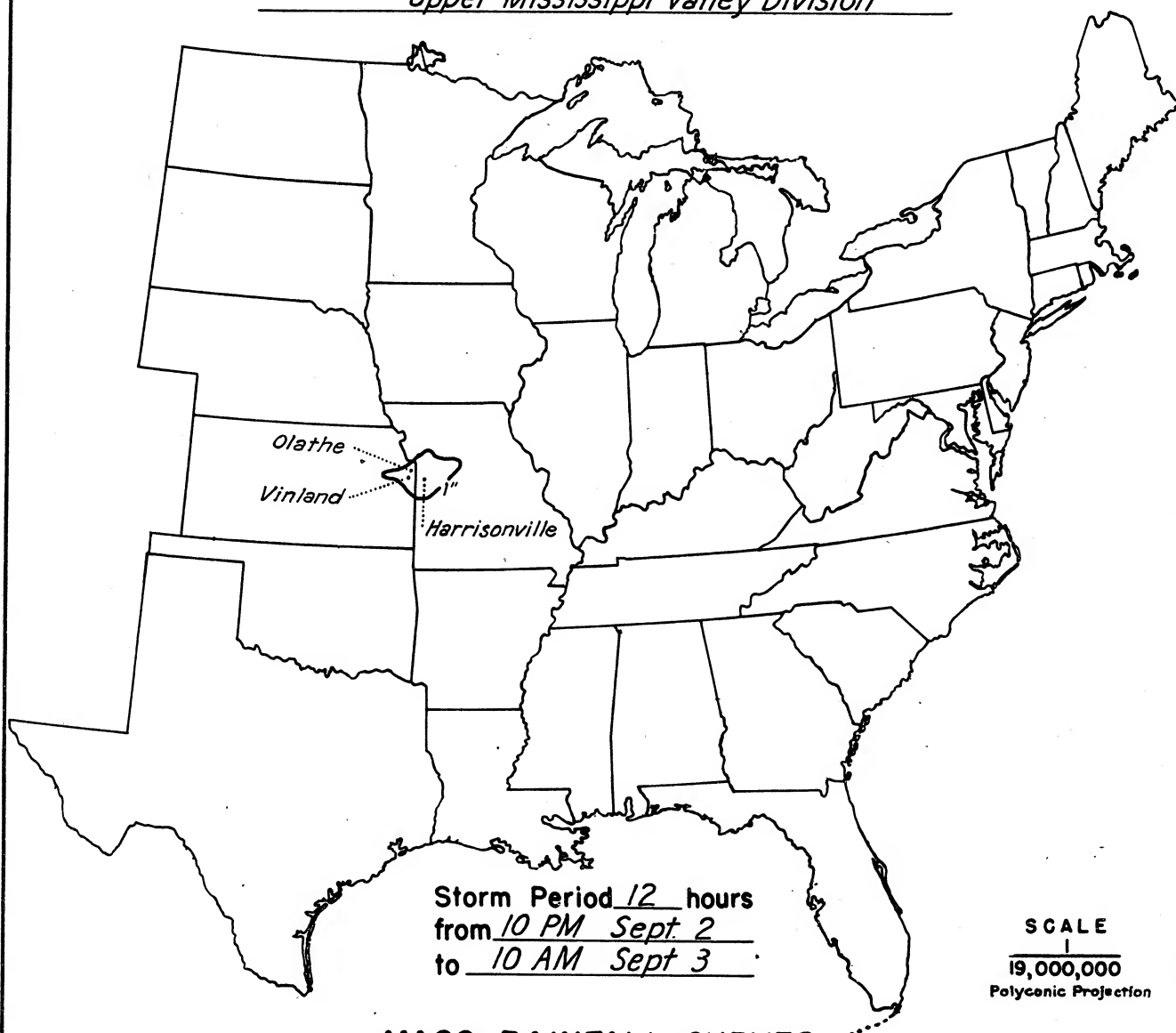
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

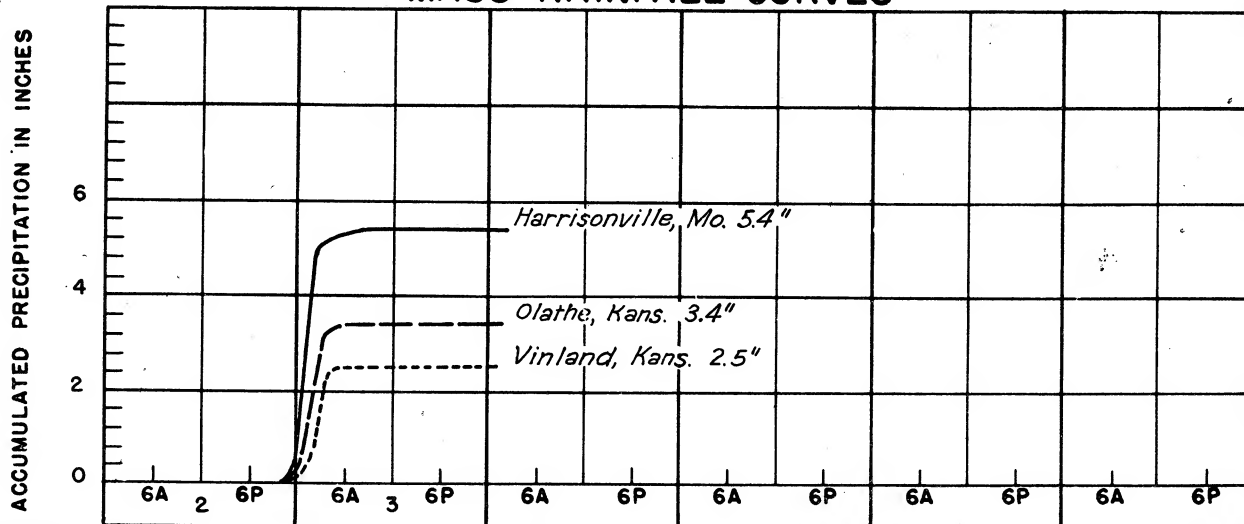
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12								
10	5.3	5.4								
50	5.0	5.2								
100	4.8	5.0								
200	4.6	4.8								
500	4.4	4.6								
1,000	4.0	4.2								
2,000	3.5	3.7								
5,000	2.6	2.7								
6,700	2.2	2.3								

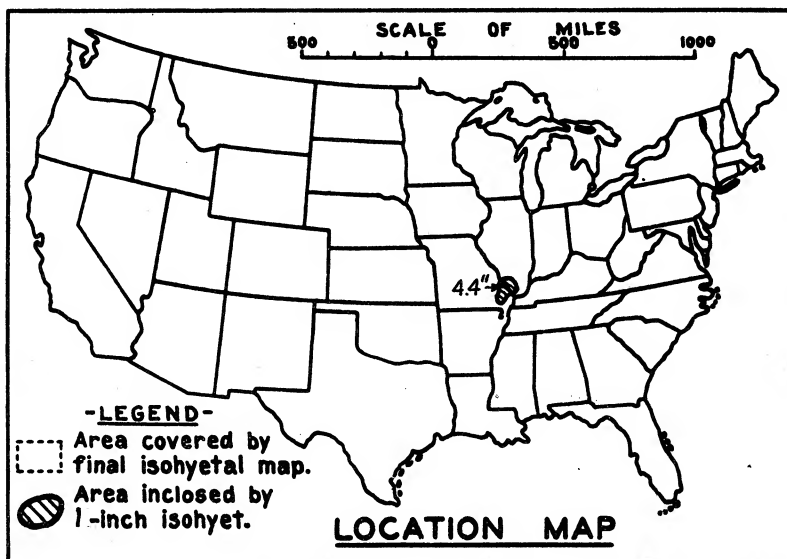
STORM STUDIES - ISOHYETAL MAP

Storm of September 2-3, 1922 Assignment UMV 3-9 A
Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 1, 1922

Assignment U M V 3 - 9 B

Location Missouri, Illinois

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8-26-41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10-2-45

Remarks:

Center at

Jackson, Missouri

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 1

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 1

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 2

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 1

Maximum duration-depth-area curves----- 1

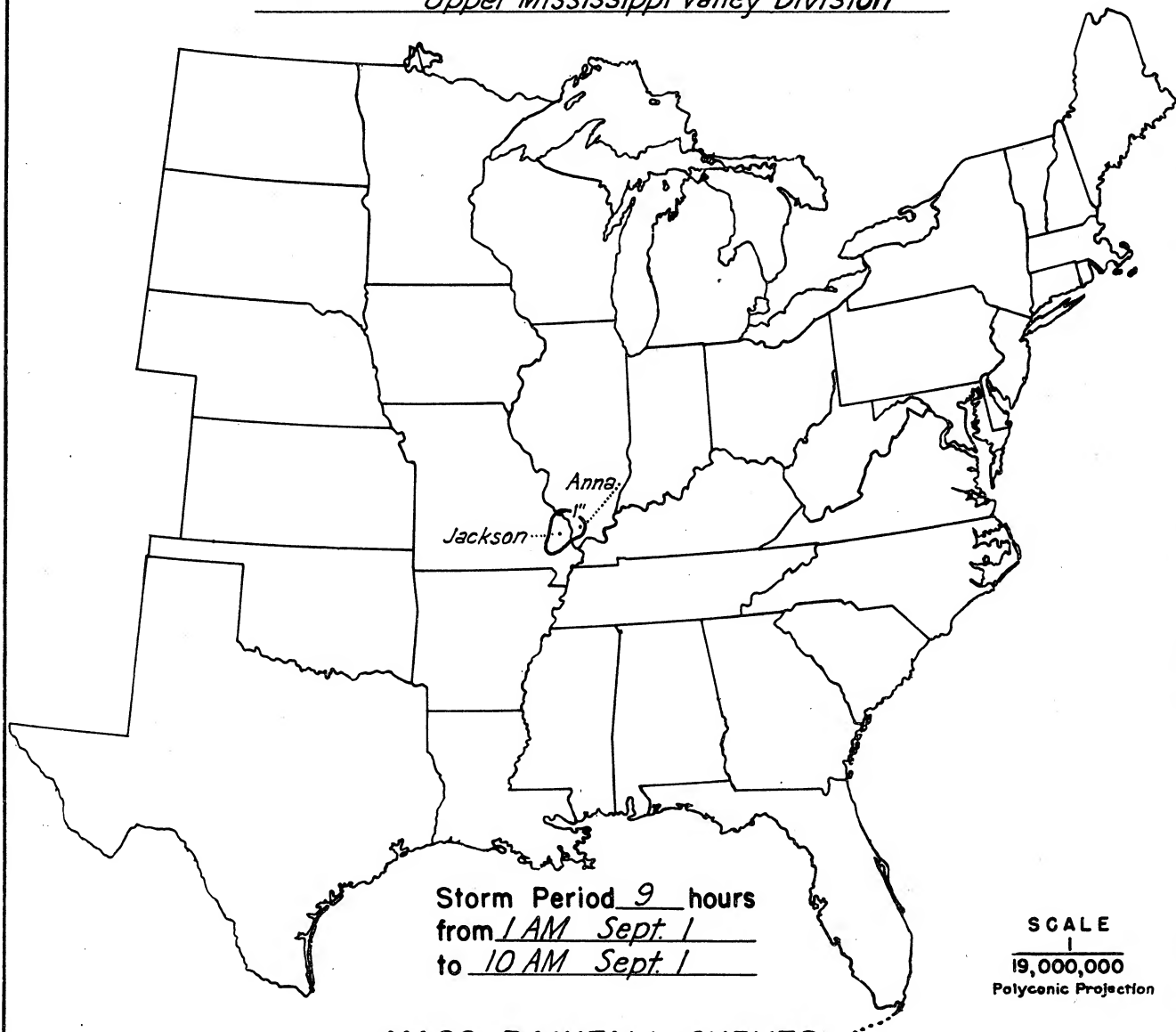
Data relating to periods of maximum rainfall----- -

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

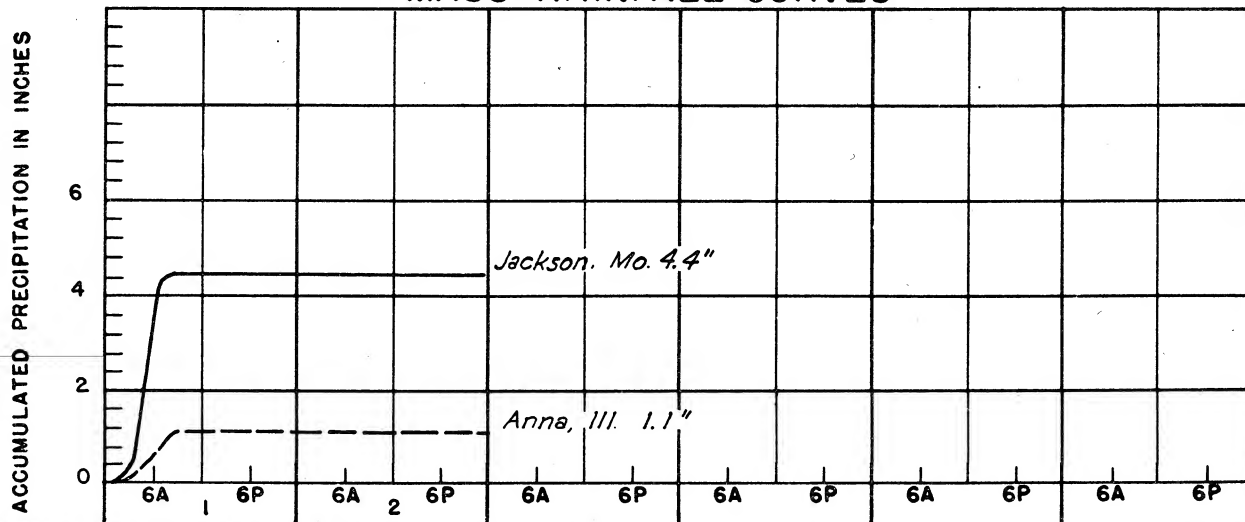
Area in Sq. Mi.	Duration of Rainfall in Hours									
	3	6	9							
10	4.3	4.4	4.4							
20	4.0	4.2	4.2							
50	3.5	4.0	4.0							
100	3.2	3.8	3.8							
200	2.8	3.6	3.6							
500	2.3	3.0	3.0							
800	1.9	2.5	2.6							
1,000	1.7	2.3	2.3							
1,200	1.5	2.0	2.1							

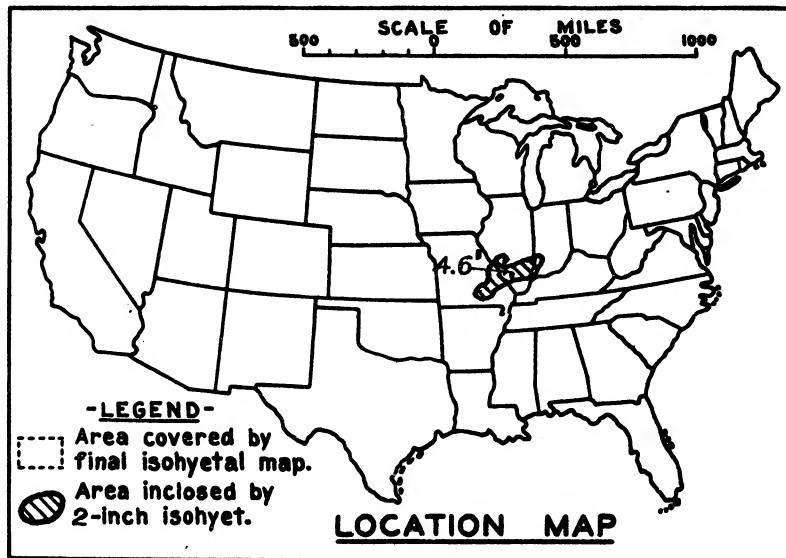
STORM STUDIES - ISOHYETAL MAP

Storm of September 1, 1922 Assignment UMV 3-9 B
Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of December 27, 1922

Assignment U M V 3 - 10

Location Mo., Ill., Ind.

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5/29/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/17/45

Remarks: Center at

Benton, Ill.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	2
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	5
Form 5002 (Mass rainfall curves)-----	5

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

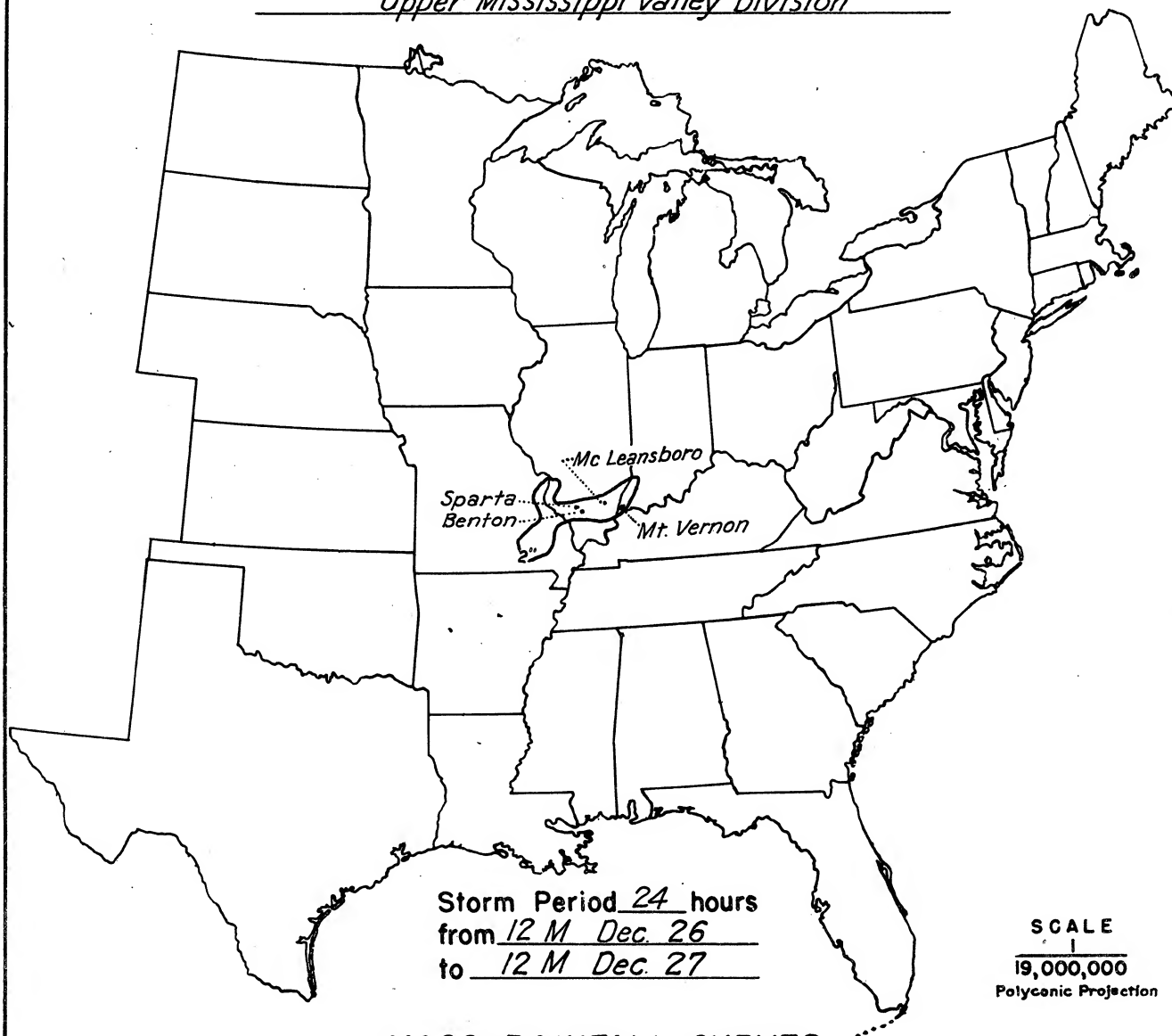
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	1
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

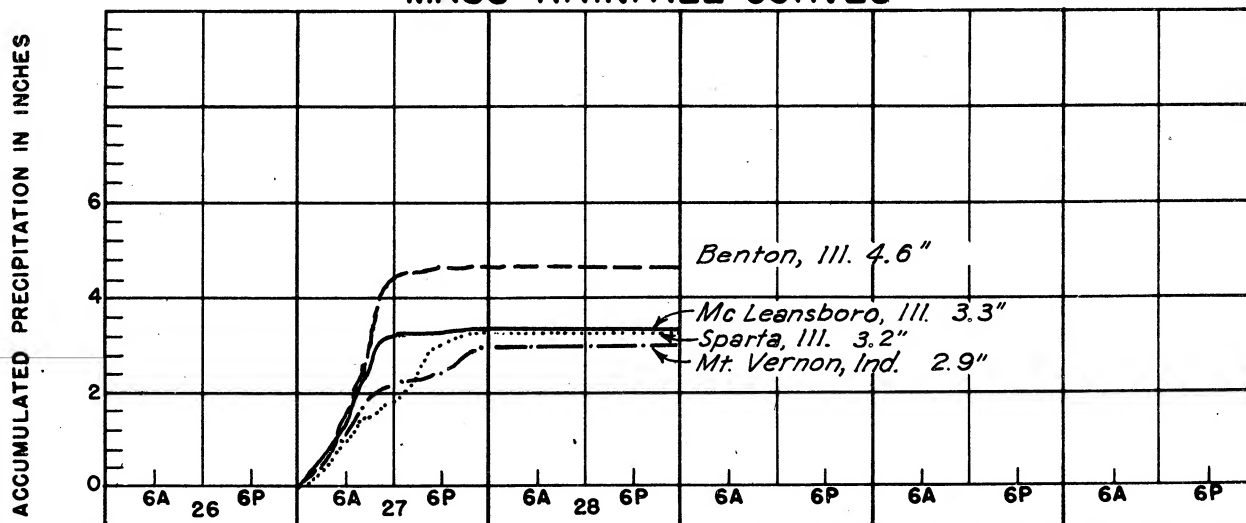
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

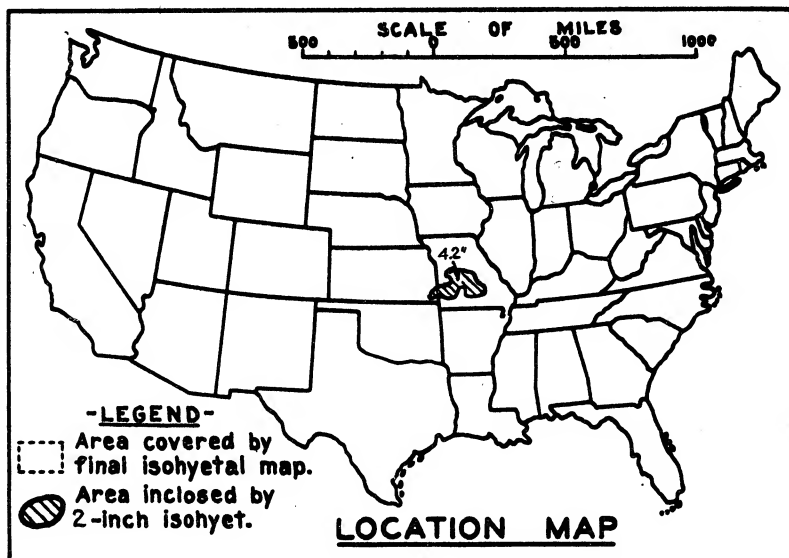
Area in Sq. Mi.	Duration of Rainfall in Hours											
	3	6	9	12	15	18	24					
10	2.5	3.4	4.0	4.3	4.5	4.6	4.6					
100	2.2	3.2	3.8	4.1	4.3	4.4	4.5					
200	2.1	3.2	3.7	4.0	4.2	4.3	4.4					
500	1.9	3.0	3.5	3.8	4.0	4.1	4.2					
1,000	1.7	2.8	3.3	3.6	3.8	3.9	4.0					
2,000	1.4	2.5	3.0	3.2	3.4	3.5	3.6					
5,000	1.1	1.9	2.4	2.6	2.9	3.0	3.1					
10,000	0.8	1.5	2.0	2.2	2.5	2.7	2.8					

STORM STUDIES - ISOHYETAL MAP

Storm of December 27, 1922 Assignment UMV 3-10Study Prepared by: St. Louis, Mo. DistrictUpper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 25-26, 1935

Assignment U M V 3 - 14

Location Missouri, Kansas

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8-26-41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9-26-45

Remarks:

Center at Clinton, Missouri

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	4
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	2
Misc. precip. records, meteorological data, etc.-----	7
Form 5002 (Mass rainfall curves)-----	6

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

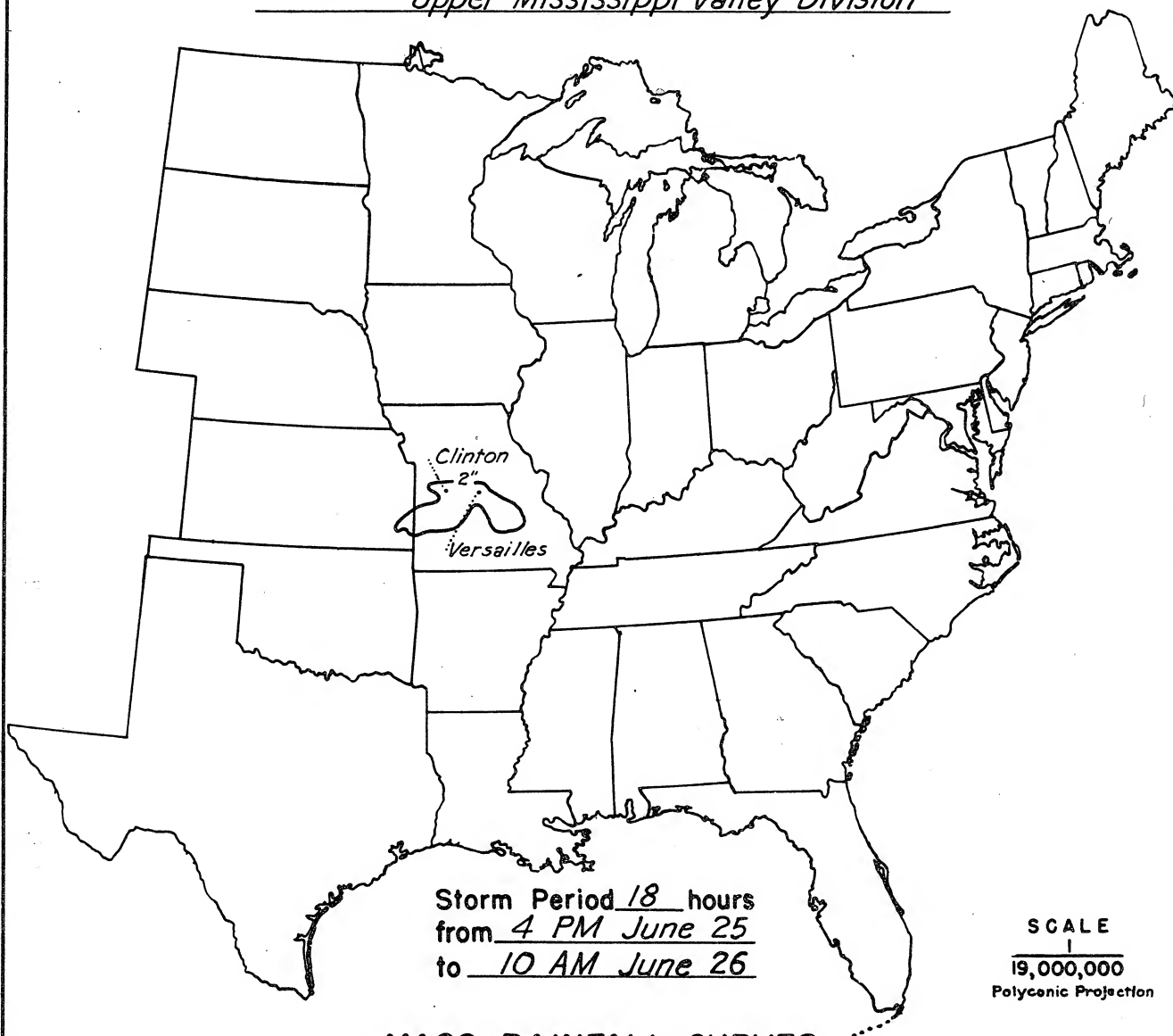
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	1
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

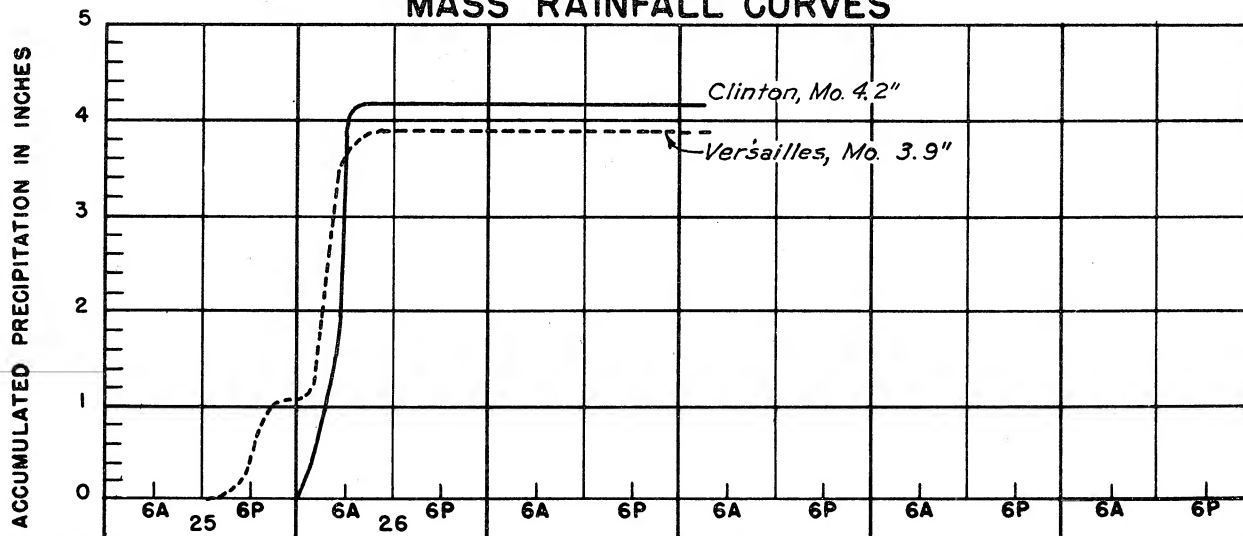
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

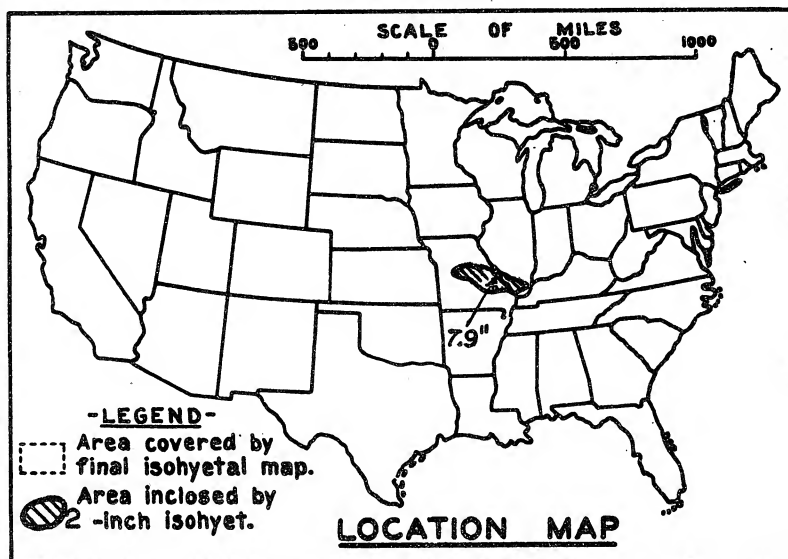
Area in Sq. Mi.	Duration of Rainfall in Hours										
	3	6	9	12	15	18					
10	2.9	4.0	4.2	4.2	4.2	4.2					
50	2.8	3.9	4.0	4.1	4.1	4.1					
100	2.6	3.6	3.8	3.9	4.0	4.1					
200	2.4	3.4	3.6	3.7	3.9	4.0					
500	2.1	3.1	3.3	3.4	3.8	3.9					
1,000	1.8	2.8	3.0	3.2	3.7	3.8					
2,000	1.6	2.6	2.8	2.9	3.6	3.7					
5,000	1.3	2.2	2.5	2.6	3.3	3.4					
10,000	1.1	2.0	2.2	2.4	2.8	2.9					
13,000	1.0	1.9	2.1	2.3	2.6	2.7					

STORM STUDIES - ISOHYETAL MAP

Storm of June 25-26, 1935 Assignment UMV 3-14Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 10 - 11, 1938

Assignment U M V 3 - 17

Location Illinois & Missouri

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8/21/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/27/45Remarks: Center at
Crystal Springs, Mo.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	7
Form 5001-B (24-hour " ")	-----	-
Form 5001-D (" " " ")	-----	3
Misc. precip. records, meteorological data, etc.	-----	-
Form 5002 (Mass rainfall curves)	-----	9

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

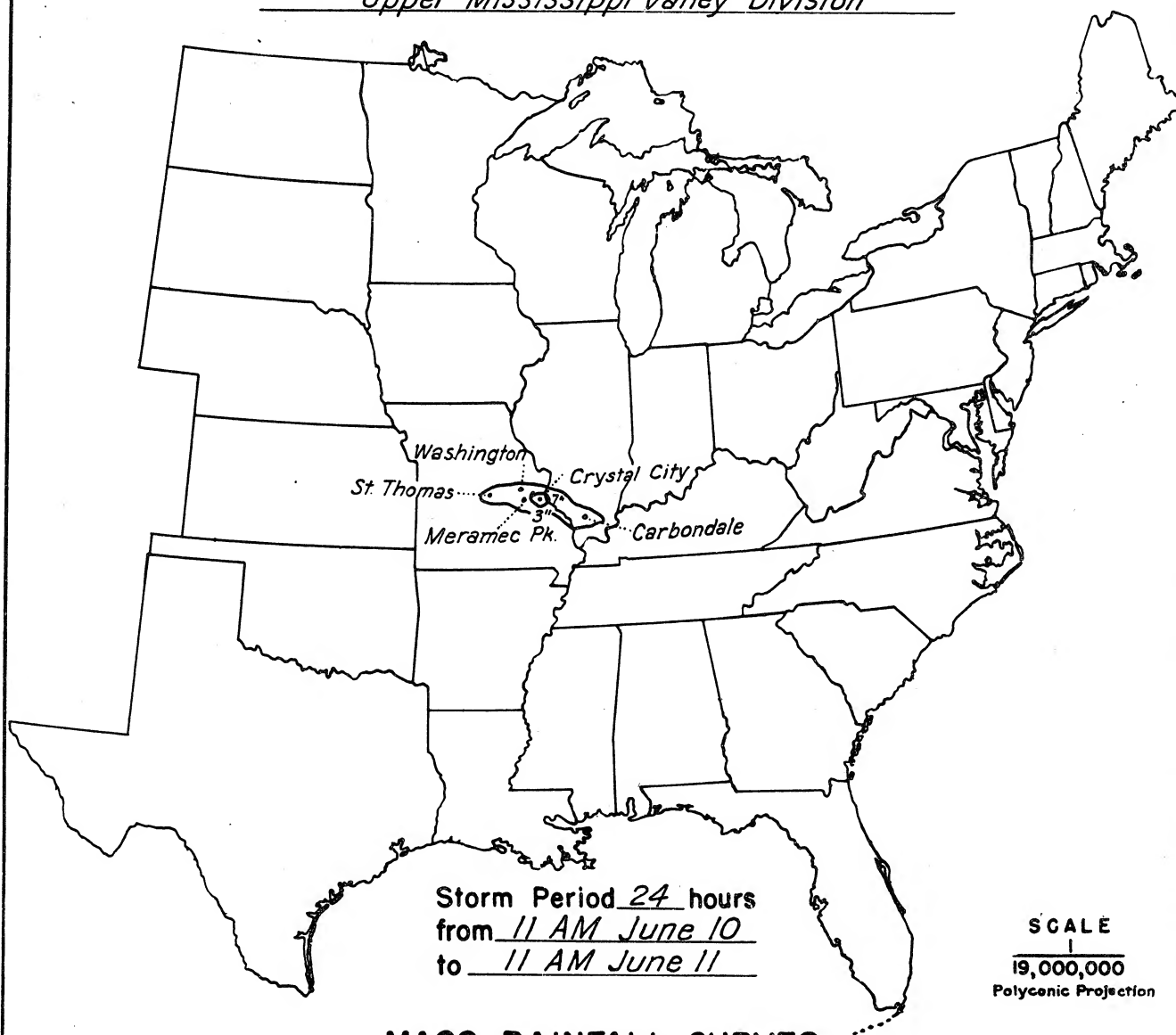
Form S-10 (Data from mass rainfall curves)	-----	2
Form S-11 (Depth-area data from isohyetal map)	-----	1
Form S-12 (Maximum depth-duration data)	-----	3
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

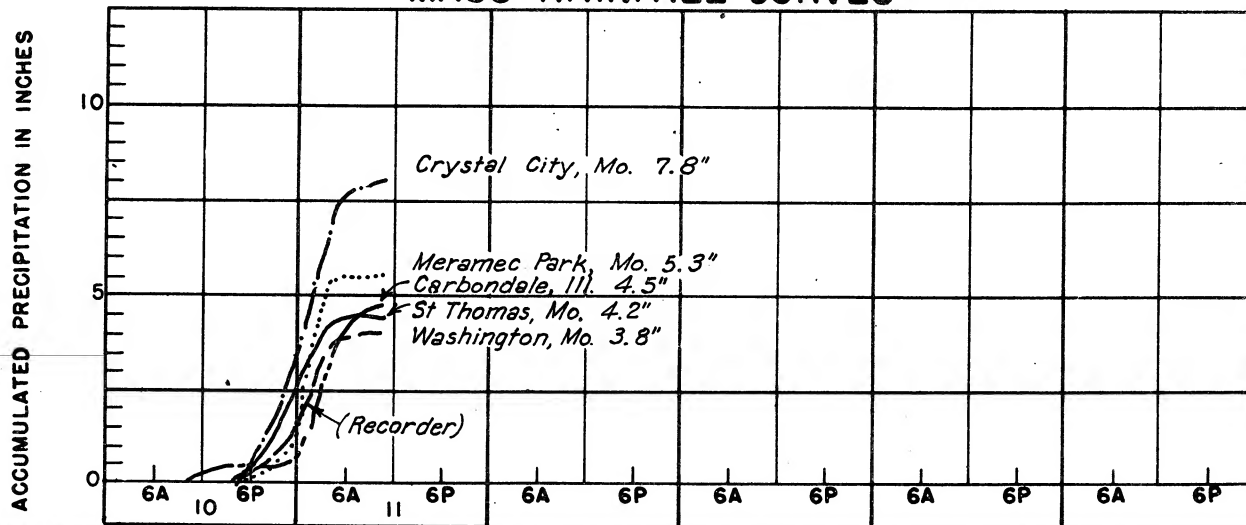
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24						
10	5.3	7.7	7.8	7.9						
100	5.1	7.4	7.6	7.7						
200	4.9	7.3	7.5	7.6						
500	4.7	6.8	7.1	7.2						
1,000	4.5	6.3	6.6	6.7						
2,000	4.2	5.7	6.0	6.1						
5,000	3.5	4.7	5.0	5.1						
10,000	2.6	3.7	4.0	4.1						
15,000	2.1	3.1	3.4	3.5						

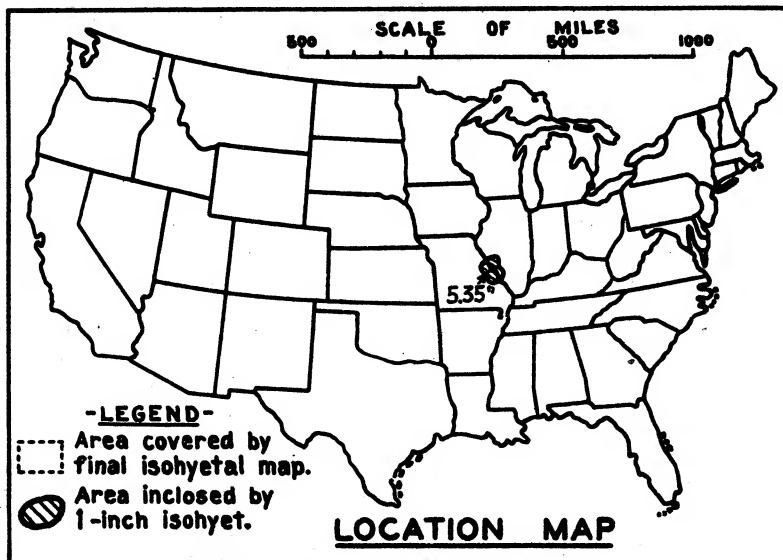
STORM STUDIES - ISOHYETAL MAP

Storm of June 10-11, 1938 Assignment UMV 3-17
Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 25, 1939

Assignment U M V 3 - 19

Location Ill. and Mo.

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/30/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/16/45

Remarks: Center at:

Lucas Garrison, (St. Louis) Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 125,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 1
 Form 5001-B (24-hour " ")----- 5
 Form 5001-D (" " " ")----- 2
 Misc. precip. records, meteorological data, etc.----- 18
 Form 5002 (Mass rainfall curves)----- 5

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 125,000

Data and computation sheets:

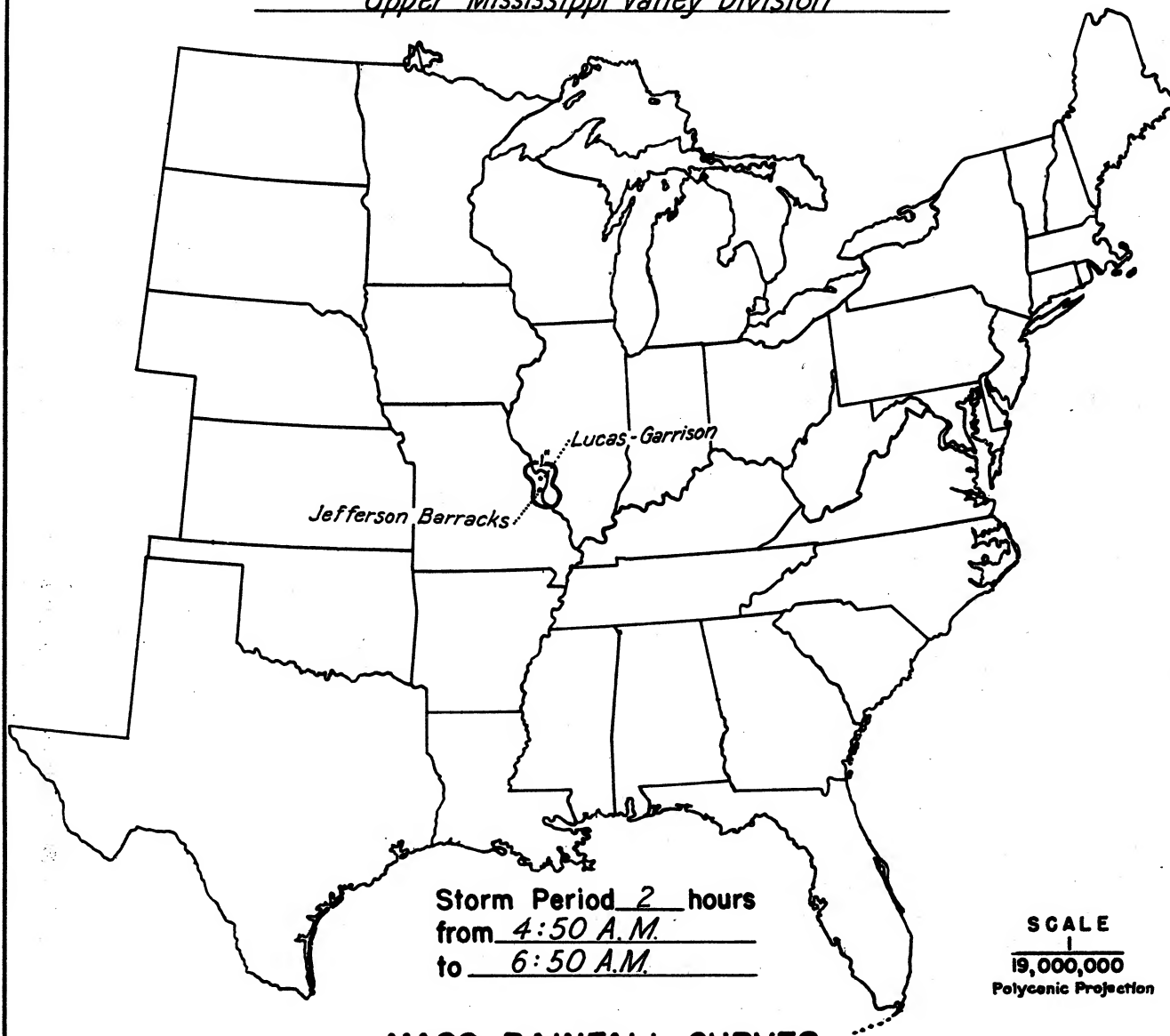
Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 3
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	1/2	1	1-1/2	2						
1	3.6	4.7	5.1	5.2						
10	3.2	4.3	4.6	4.8						
20	2.9	4.0	4.4	4.6						
50	2.5	3.6	3.9	4.0						
100	2.2	3.1	3.5	3.6						
200	1.9	2.6	3.0	3.1						
500	1.4	2.1	2.4	2.5						
900	1.0	1.8	1.9	2.0						

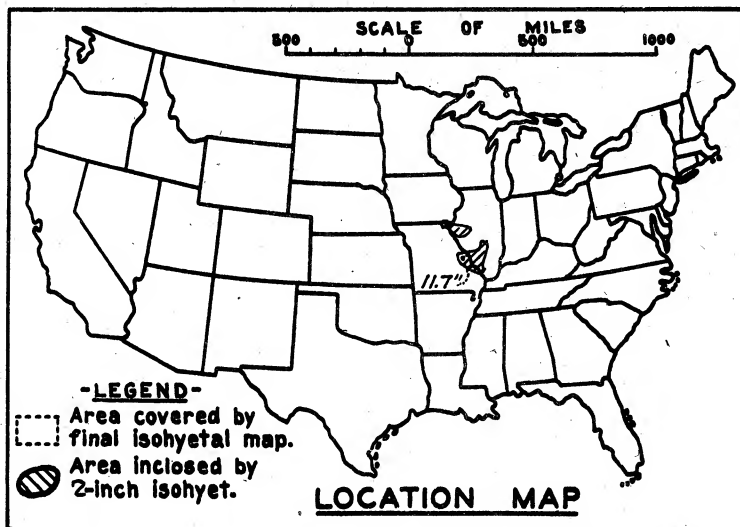
STORM STUDIES - ISOHYETAL MAP

Storm of August 25, 1939 Assignment UMV 3-19
Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 7-9 July 1942

Assignment UMW 3-21

Location Illinois - Missouri

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/11/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/19/46Remarks: Center at
Thompson Farm, Mo.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	27
Form 5001-B (24-hour " ")-----	--
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	5
Form 5002 (Mass rainfall curves)-----	20

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

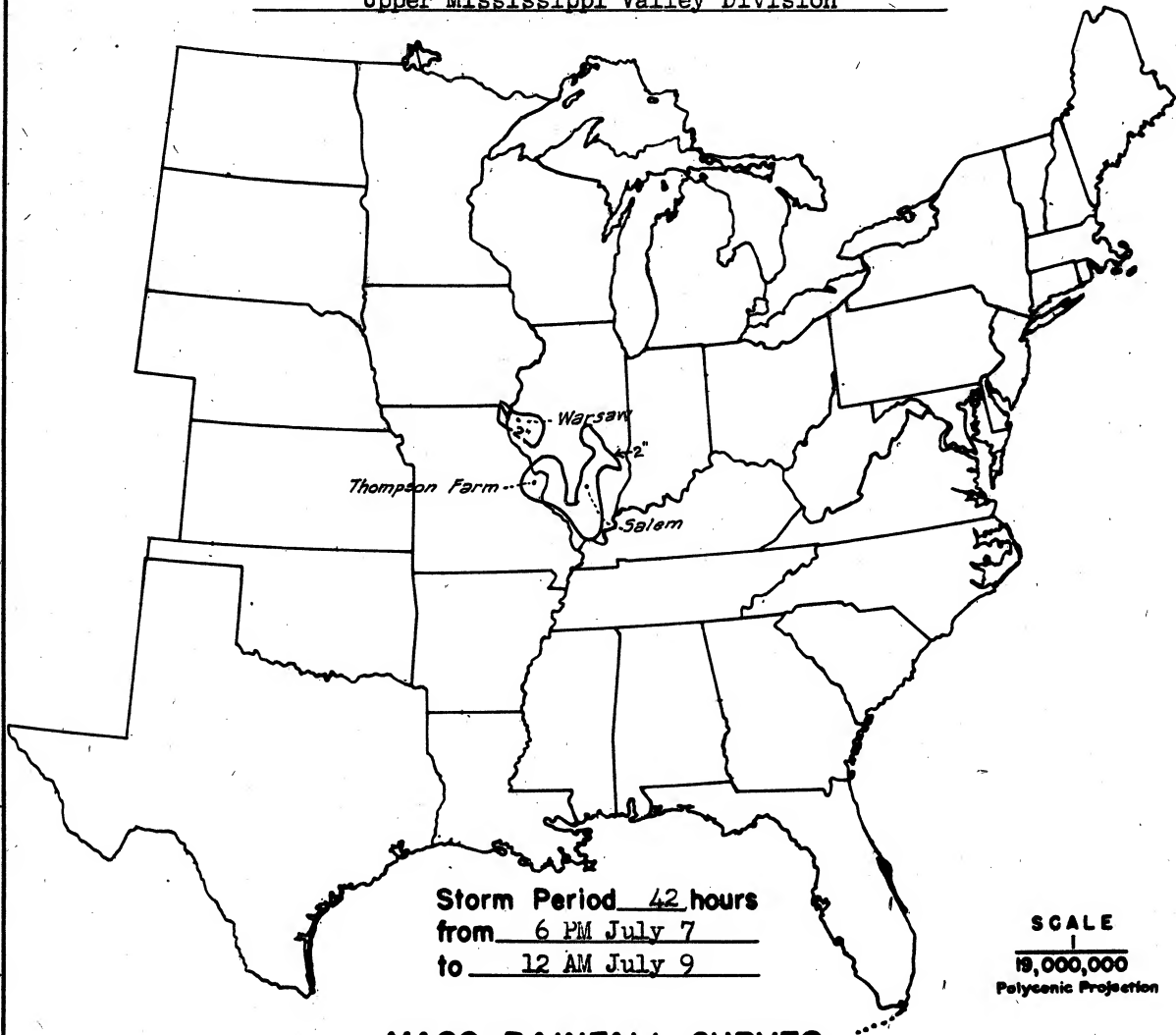
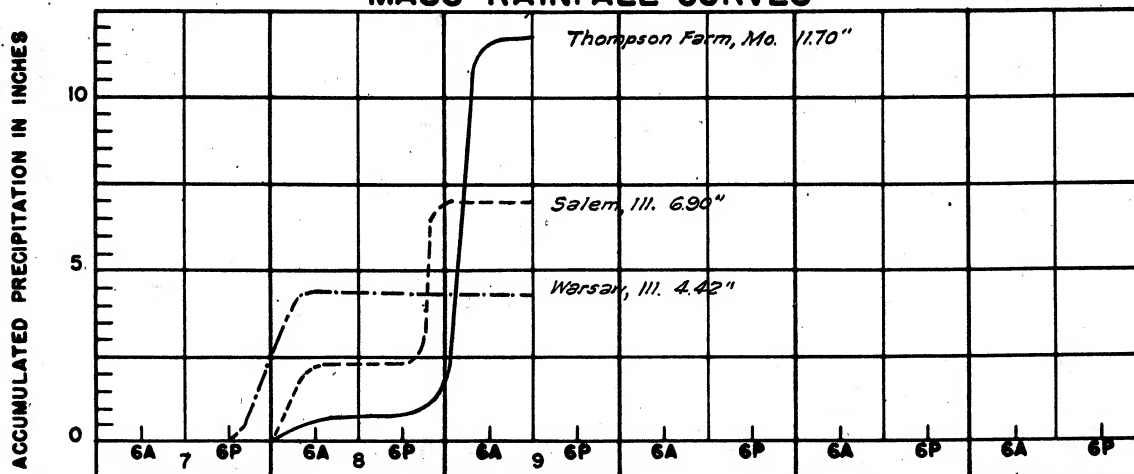
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

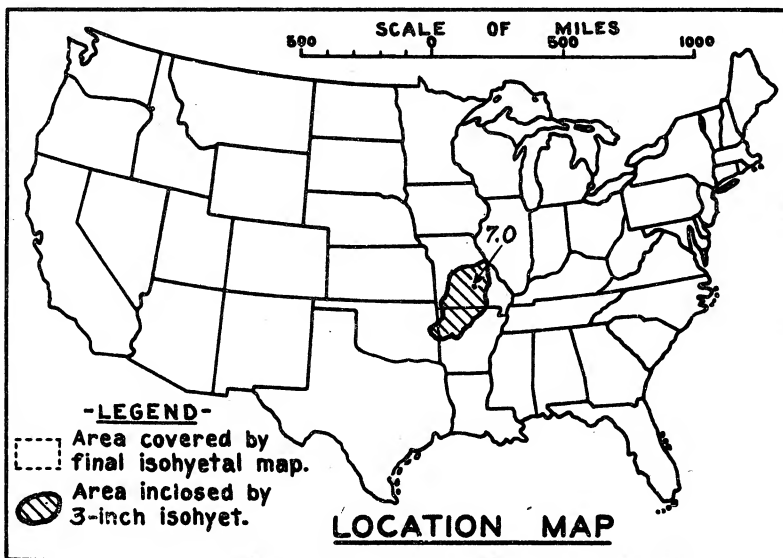
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	42				
10	9.5	11.0	11.0	11.0	11.7	11.7	11.7				
100	8.1	9.5	9.7	9.7	10.1	10.4	10.4				
200	7.5	8.8	9.1	9.1	9.4	9.7	9.7				
500	6.3	7.3	7.8	7.8	8.0	8.2	8.2				
1,000	4.9	5.9	6.4	6.4	6.9	7.0	7.0				
2,000	3.6	4.4	4.7	4.7	5.5	5.8	5.8				
5,000	2.2	3.1	3.3	3.3	4.2	4.4	4.4				
10,000	1.3	2.4	2.6	2.6	3.4	3.5	3.6				
12,600	1.1	2.2	2.4	2.4	3.1	3.3	3.4				

STORM STUDIES - ISOHYETAL MAP

Storm of July 7 - 9, 1942 Assignment UMV 3-21
Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of December 26-28, 1942

Assignment U M V 3 - 22

Location Ark. Mo. Okla.

Study Prepared by:

Upper Mississippi Valley
Division

St. Louis District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8/10/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/7/45Remarks: Center at:
Salem, Missouri**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	49
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	10
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	29

PART II

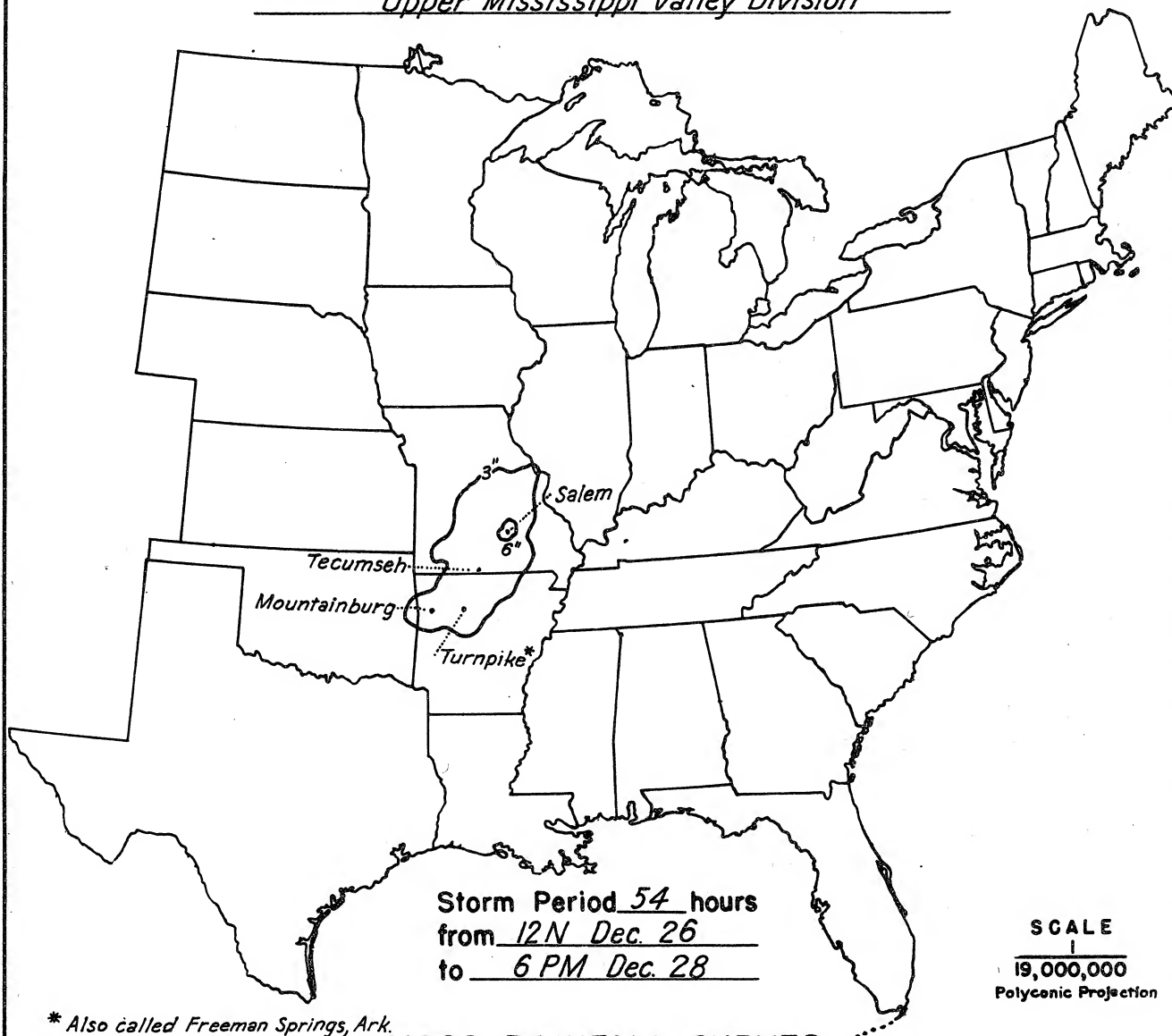
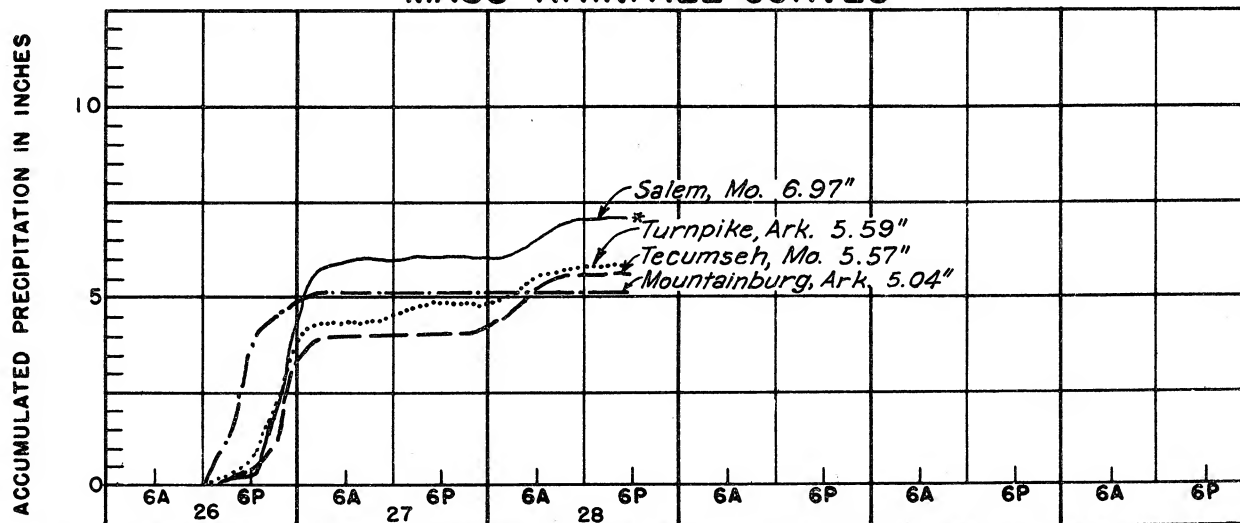
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

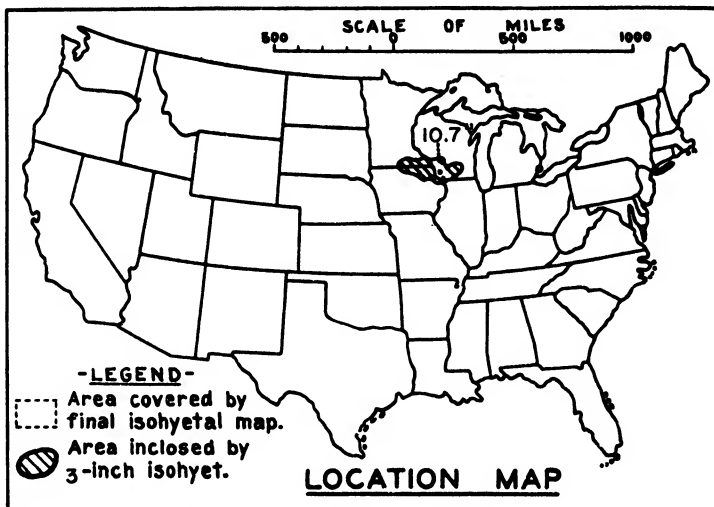
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	4
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	5
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	54		
10	4.5	5.8	5.9	5.9	5.9	6.0	7.0	7.0		
100	4.3	5.6	5.7	5.7	5.7	5.9	6.8	6.8		
200	4.2	5.6	5.7	5.7	5.7	5.8	6.8	6.8		
500	4.1	5.4	5.6	5.6	5.6	5.7	6.7	6.7		
1,000	3.9	5.3	5.4	5.4	5.4	5.6	6.5	6.5		
2,000	3.6	5.1	5.2	5.2	5.2	5.4	6.2	6.3		
5,000	3.1	4.5	4.8	4.8	4.8	4.9	5.6	5.8		
10,000	2.8	4.0	4.4	4.4	4.4	4.6	5.2	5.3		
20,000	2.4	3.5	4.0	4.0	4.0	4.1	4.7	4.8		
30,000	2.1	3.1	3.6	3.6	3.7	3.8	4.3	4.4		
45,000	1.9	2.7	3.3	3.3	3.4	3.4	4.0	4.1		

STORM STUDIES - ISOHYETAL MAPStorm of December 26-28, 1942 Assignment UMV 3-22Study Prepared by: St. Louis, Mo. District
Upper Mississippi Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 15-16 July 1950
 Assignment U M V 3 - 28
 Location Minn., Iowa, Wis.

Study Prepared by:
 North Central Division
 Rock Island District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9-29-52

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7-15-59

Remarks: Center near Milflin,
 Wis.

Dewpt. 71° - Ref. Pt. 300 SW
 Grid D-12

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	37
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	2
Form 5002 (Mass rainfall curves)-----	25

PART II

Final isohyetal maps, in 1 sheet, scale 1:500,000

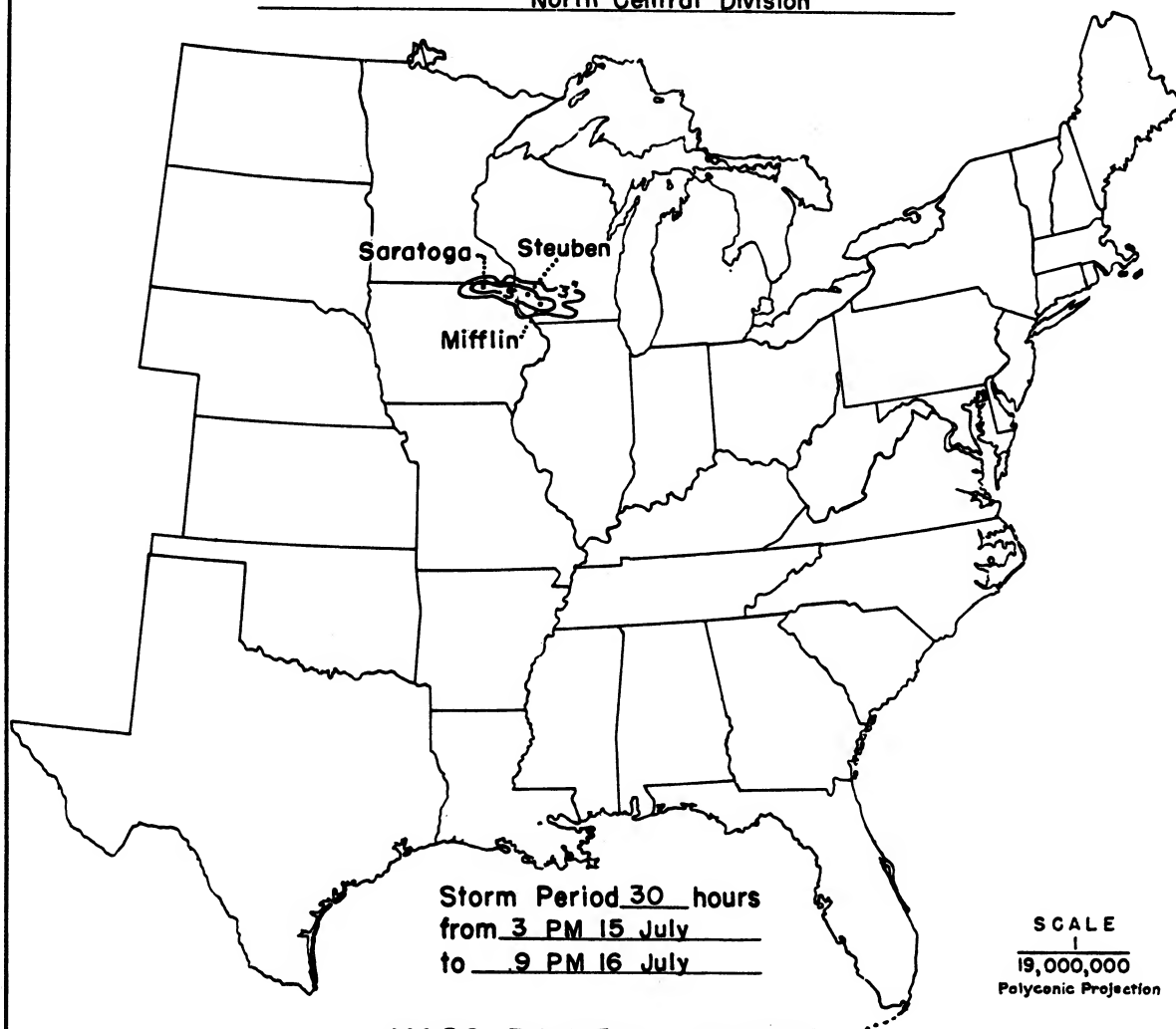
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

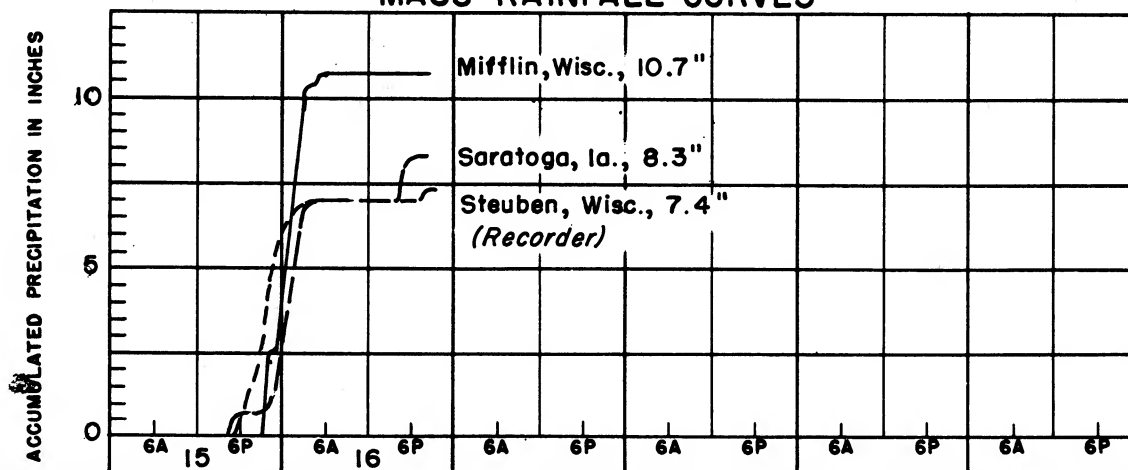
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

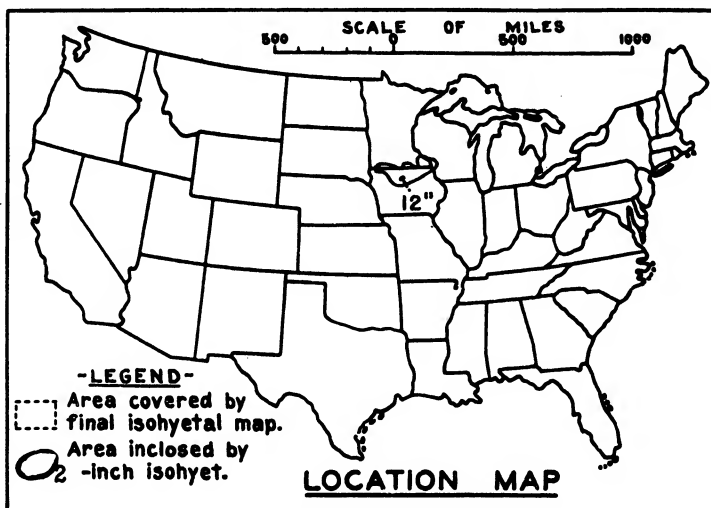
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30					
Max. Station	10.3	10.7	10.7	10.7	10.7					
10	9.7	10.1	10.1	10.1	10.1					
100	7.5	8.7	8.8	8.8	9.0					
200	6.6	8.0	8.1	8.1	8.3					
500	5.7	7.2	7.4	7.4	7.6					
1000	5.1	6.7	6.9	6.9	7.2					
2000	4.6	6.1	6.3	6.3	6.6					
5000	3.8	5.1	5.2	5.2	5.6					
10000	2.8	3.8	3.9	3.9	4.3					
10500	2.7	3.7	3.8	3.8	4.2					

STORM STUDIES - ISOHYETAL MAP

Storm of 15-16 July 1950Assignment UMV 3-28Study Prepared by: Rock Island, Ill. DistrictNorth Central Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 25-26 June 1951
 Assignment UMW 3-29
 Location Iowa, Minnesota & Wisc.
 Study Prepared by:
 North Central Division
 Rock Island District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11-21-55
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7-18-57

Remarks:
 Center near Dumont, Iowa. Rep.
 Dewpoint 72°, Ref. Pt. 160 SW

DATA AND COMPUTATIONS COMPILED

Grid D-13

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	56
Form 5001-B (24-hour " " " ")-----	-
Form 5001-D (" " " " " ")-----	11
Miscl. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	45

PART II

Final isohyetal maps, in 1 sheet, scale 1:500,000

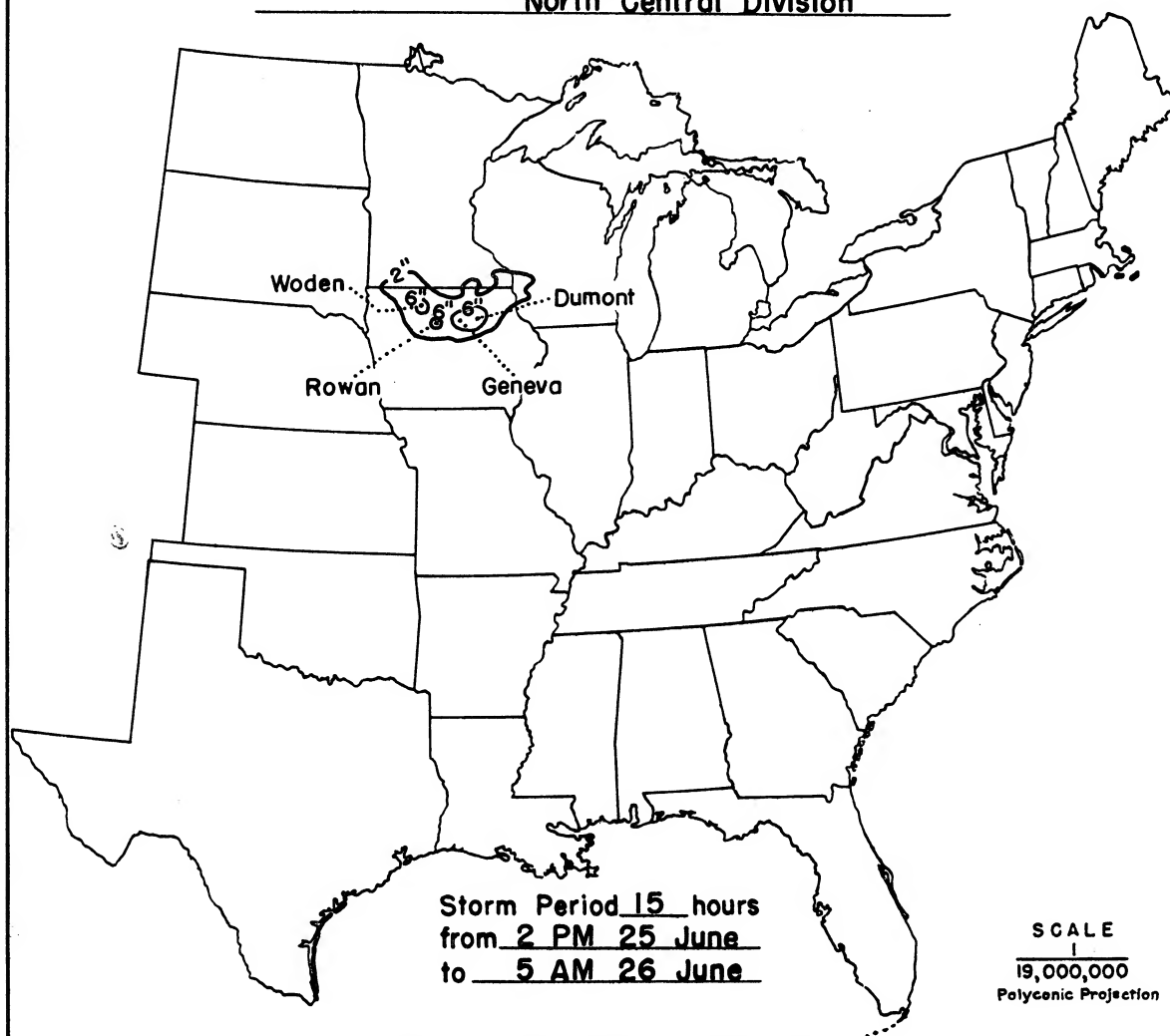
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

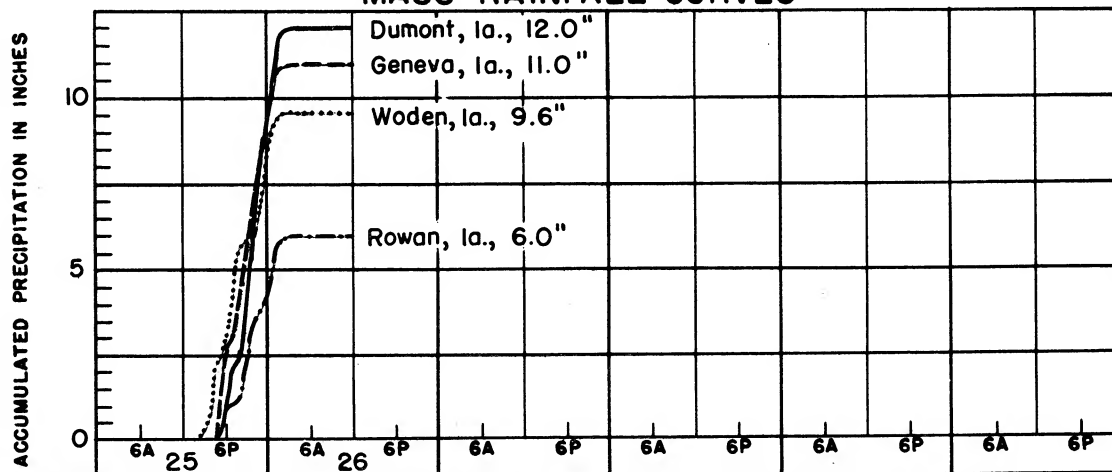
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

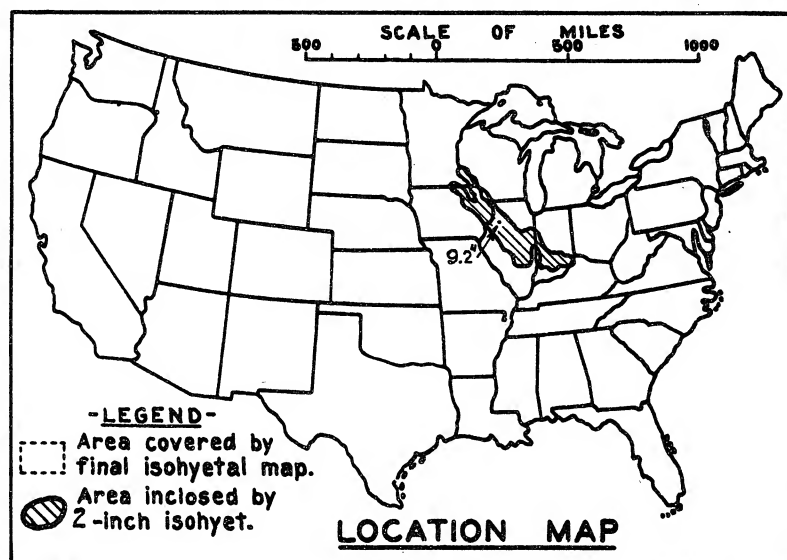
Area in Sq. Mi.	Duration of Rainfall in Hours									
	3	6	9	12	15					
Max. Station	6.8	9.4	11.6	12.0	12.0					
10	5.8	9.2	11.6	12.0	12.0					
100	4.4	7.7	9.7	10.0	10.0					
200	4.1	7.1	8.6	8.9	8.9					
500	3.6	6.1	7.3	7.5	7.6					
1000	3.2	5.3	6.4	6.6	6.6					
2000	2.7	4.5	5.4	5.6	5.7					
5000	2.1	3.5	4.2	4.4	4.5					
10000	1.6	2.7	3.3	3.5	3.6					
20000	1.2	1.9	2.3	2.5	2.6					

STORM STUDIES - ISOHYETAL MAP

Storm of 25-26 June 1951Assignment UMV 3-29Study Prepared by: Rock Island, Ill. District
North Central Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 18 - 20, 1924

Assignment U M V 4 - 11

Location Ill. & Iowa

Study Prepared by:

Upper Mississippi Valley
Division

Chicago District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/17/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/2/45Remarks: Center at
Galva, Illinois**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data) ----- 17

Form 5001-B (24-hour " ") ----- -

Form 5001-D (" " " ") ----- 14

Misc. precip. records, meteorological data, etc. ----- 1

Form 5002 (Mass rainfall curves) ----- 16

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves) ----- 3

Form S-11 (Depth-area data from isohyetal map) ----- 1

Form S-12 (Maximum depth-duration data) ----- 5

Maximum duration-depth-area curves ----- 1

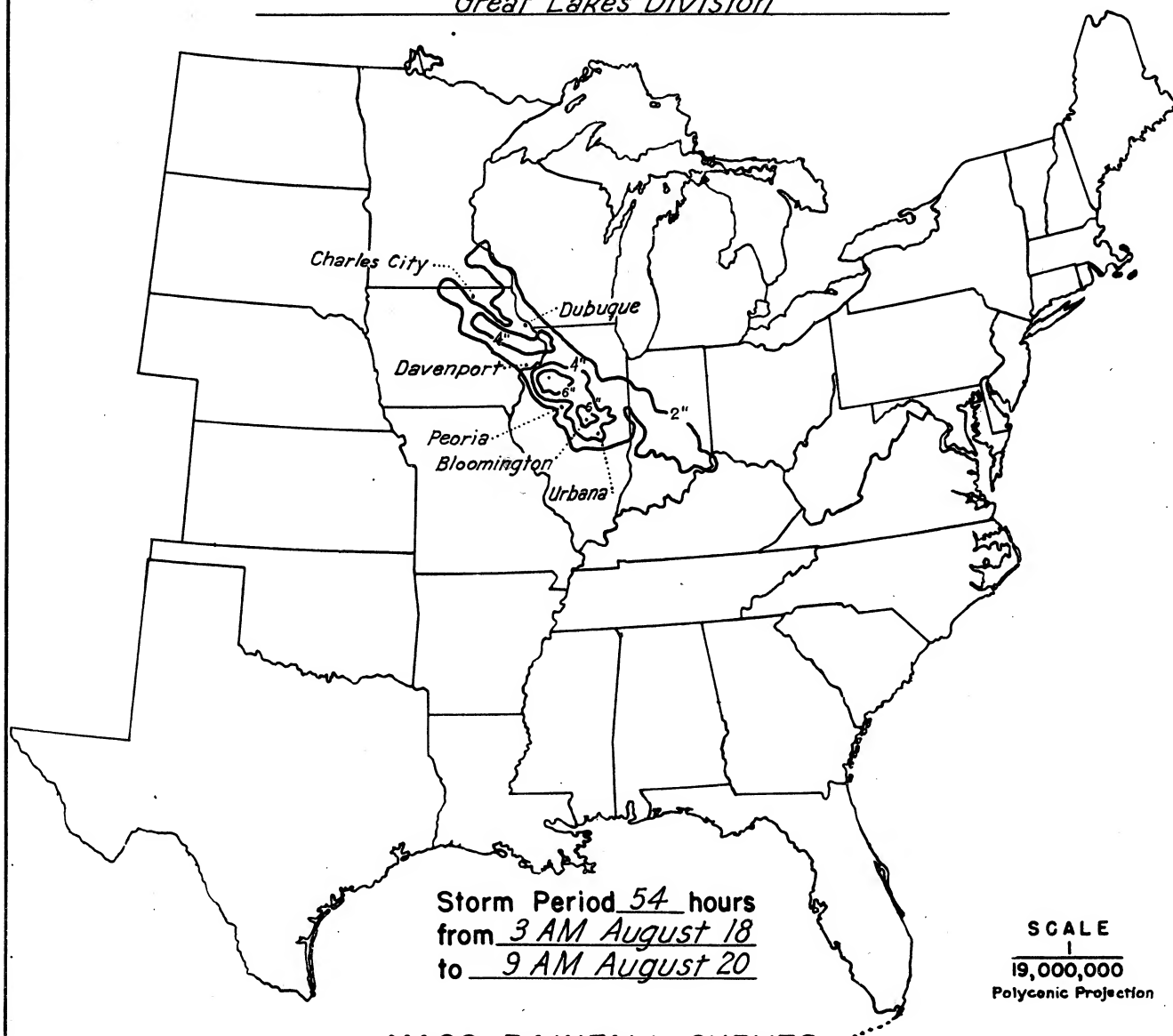
Data relating to periods of maximum rainfall ----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

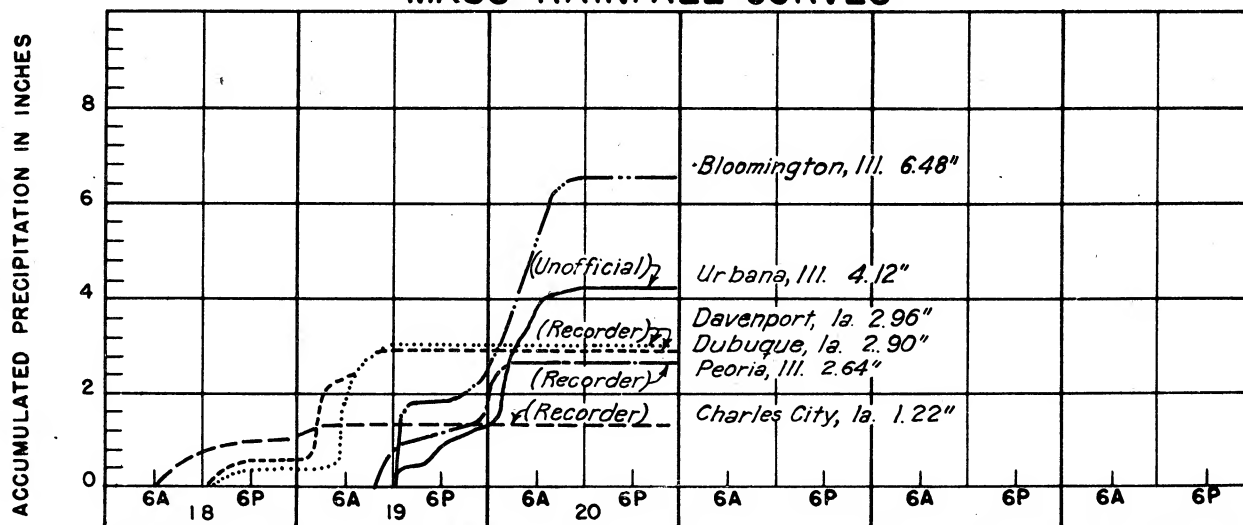
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	54	
10	6.6	6.8	8.4	9.2	9.2	9.2	9.2	9.2	
100	6.2	6.4	8.0	8.7	8.7	8.7	8.7	8.7	
200	6.0	6.2	7.7	8.4	8.4	8.4	8.4	8.4	
500	5.5	5.7	7.1	7.8	7.8	7.8	7.8	7.8	
1,000	4.8	5.1	6.4	7.2	7.2	7.2	7.2	7.2	
2,000	4.0	4.5	5.6	6.4	6.5	6.5	6.5	6.5	
5,000	3.0	3.5	4.4	5.2	5.5	5.5	5.5	5.5	
10,000	2.3	2.8	3.3	4.3	4.6	4.7	4.9	4.9	
20,000	1.5	2.0	2.3	3.2	3.5	3.6	4.1	4.2	
28,500	1.1	1.6	1.7	2.3	2.9	3.0	3.6	3.7	

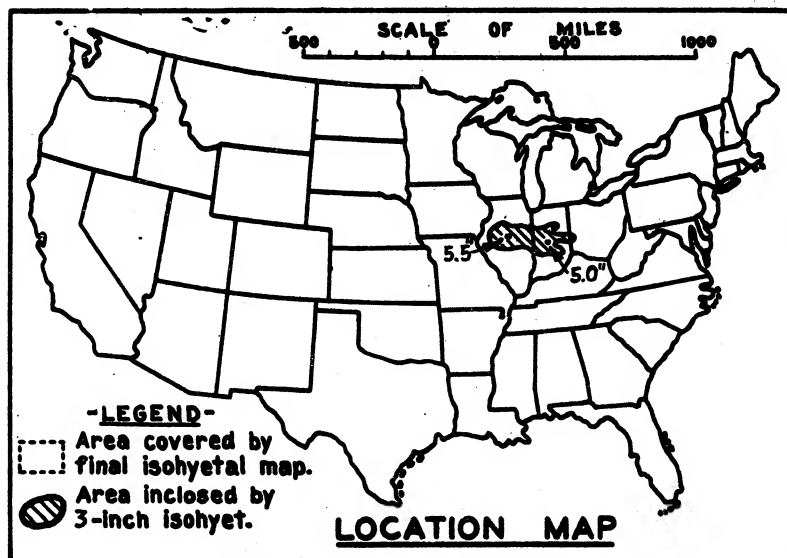
STORM STUDIES - ISOHYETAL MAP

Storm of August 18-20, 1924 Assignment UMV 4-11
 Study Prepared by: Chicago, Ill. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 17 - 19, 1927
 Assignment U M V 4 - 12
 Location Ill. and Ind.
 Study Prepared by:

Great Lakes Division
 Chicago District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12/3/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 8/30/44

Remarks: Centers at :
 Peoria, Ill. and Anderson, Ind.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 16
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 9
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 19

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

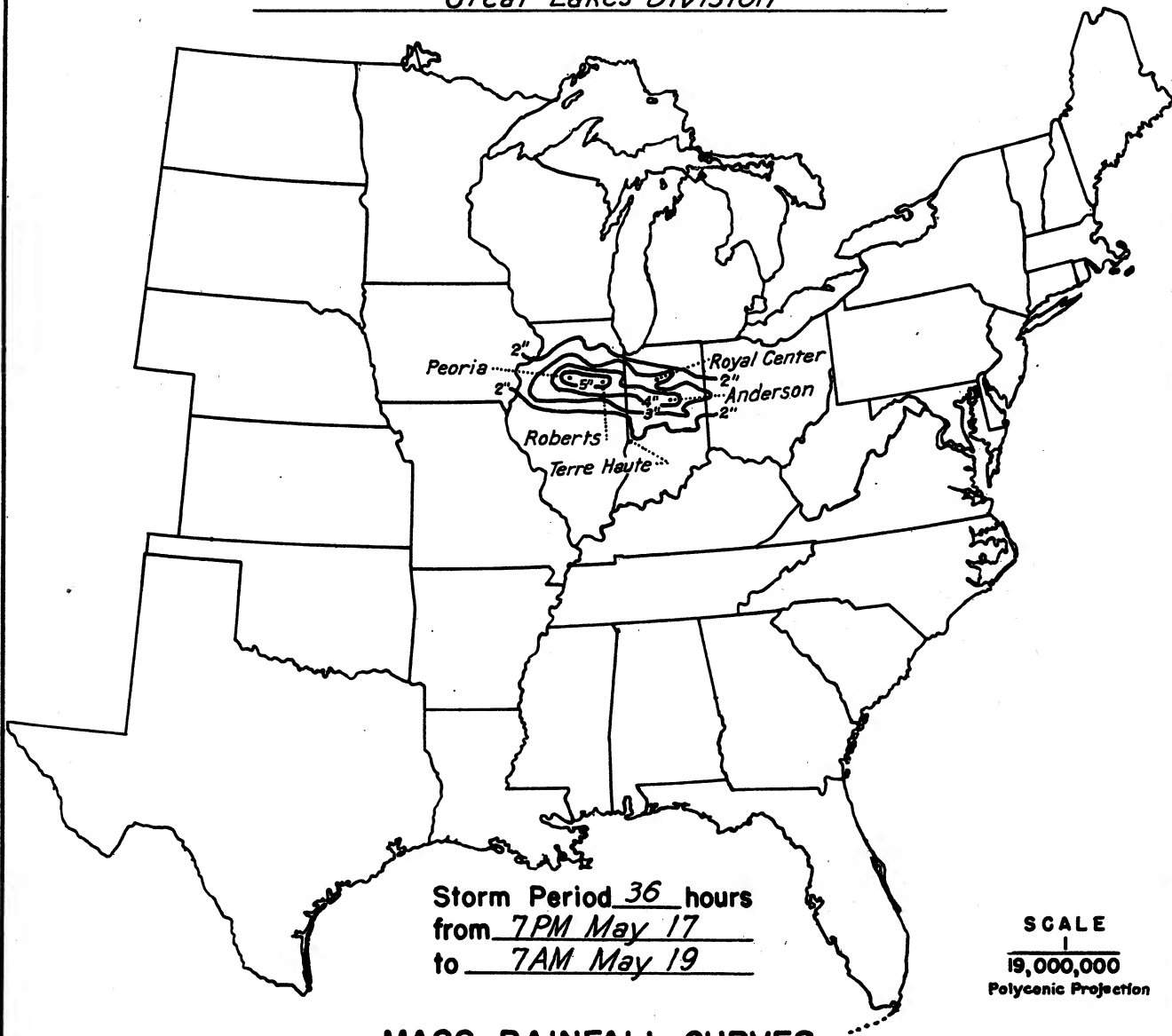
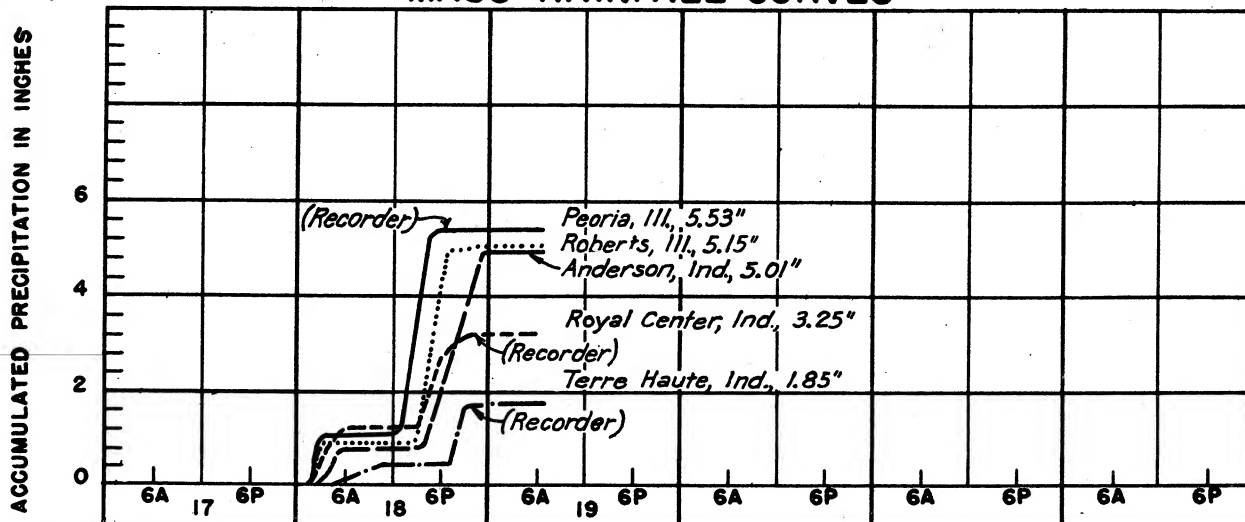
Form S-10 (Data from mass rainfall curves)----- 2
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 4
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

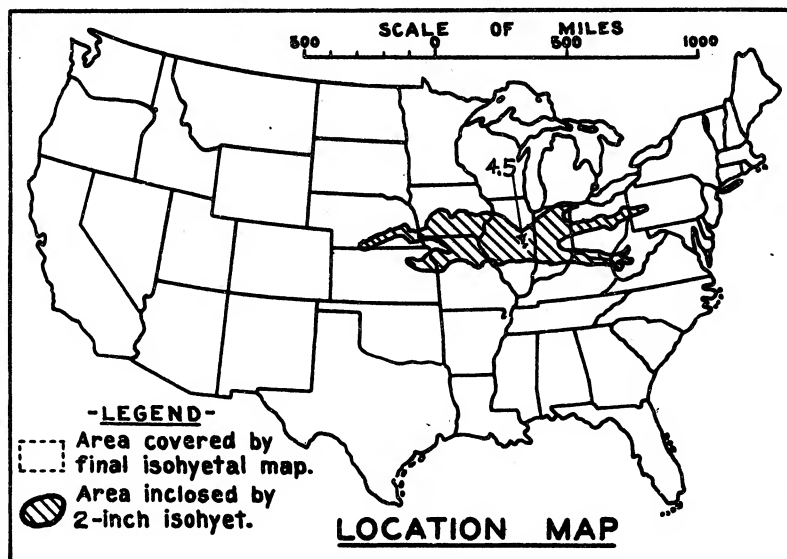
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36						
10	4.3	4.3	5.5	5.5	5.5	5.5						
100	4.1	4.2	5.3	5.4	5.4	5.4						
200	4.0	4.1	5.3	5.4	5.4	5.4						
500	3.9	4.0	5.2	5.3	5.3	5.3						
1,000	3.8	3.9	5.1	5.1	5.2	5.2						
2,000	3.6	3.8	4.8	4.8	5.0	5.0						
5,000	3.1	3.4	4.2	4.4	4.5	4.5						
10,000	2.5	3.0	3.5	3.9	4.0	4.0						
20,000	1.7	2.4	2.6	3.3	3.4	3.4						

STORM STUDIES - ISOHYETAL MAP

Storm of May 17-19, 1927 Assignment UMV 4-12
Study Prepared by: Chicago, Ill. District
Great Lakes Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of March 9 - 12, 1939

Assignment U M V 4 - 16

Location Missouri - Ohio

Study Prepared by:

Great Lakes Division

Chicago District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/8/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/30/43Remarks: Center at:
Charleston, Ill.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	48
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	44
Misc. precip. records, meteorological data, etc.-----	8
Form 5002 (Mass rainfall curves)-----	62

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

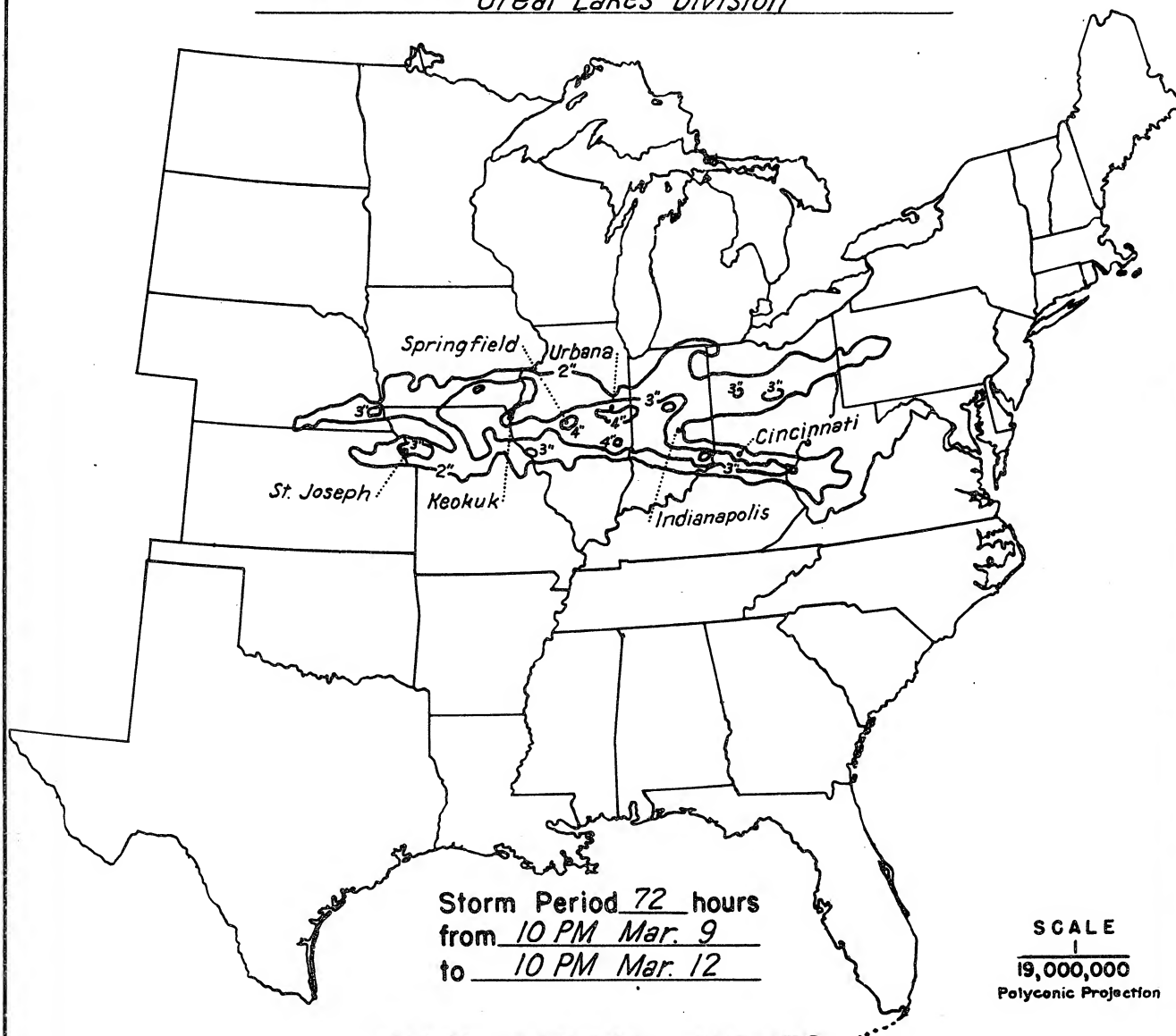
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	7
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

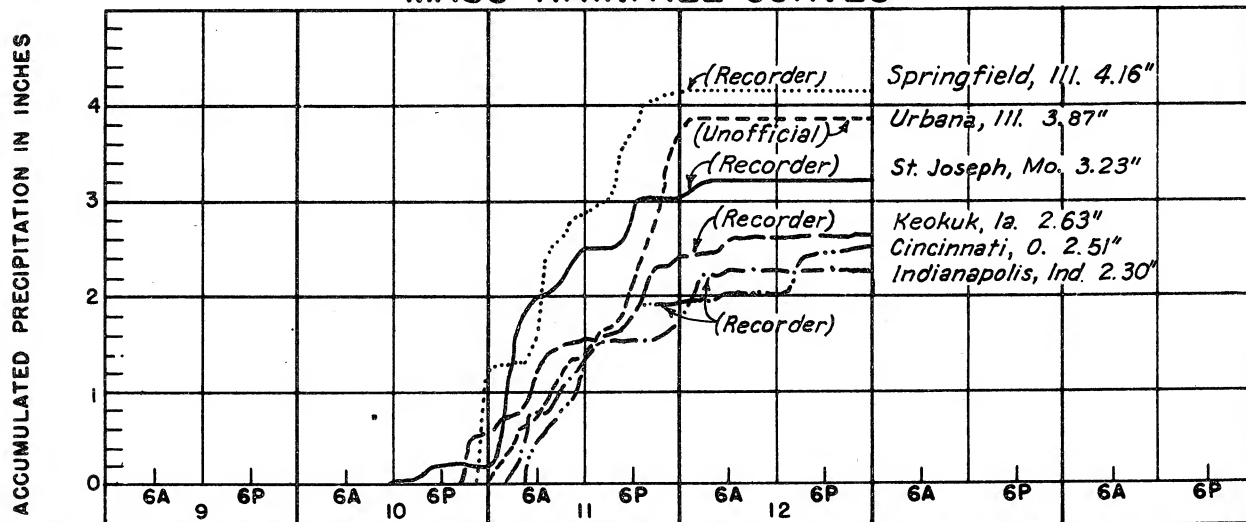
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

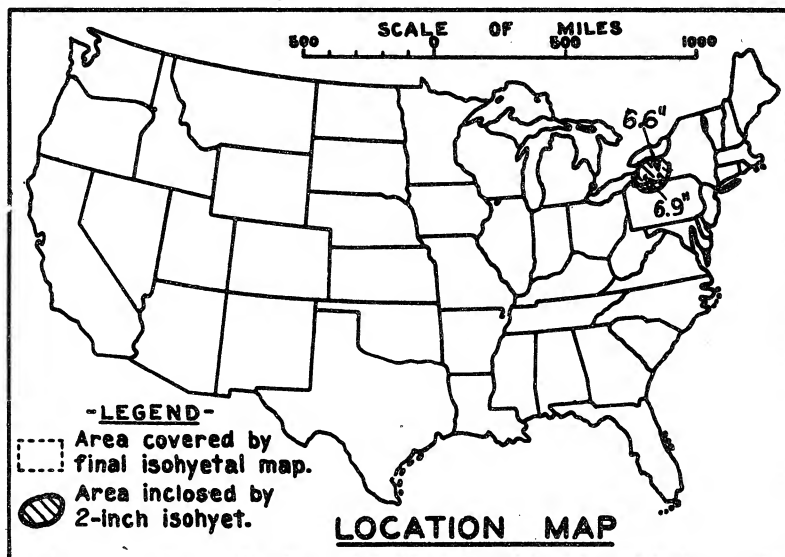
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	3.0	3.8	3.8	4.2	4.4	4.5	4.5	4.5	4.5	
100	2.3	3.4	3.5	4.2	4.2	4.4	4.4	4.4	4.4	
200	2.1	3.1	3.3	4.1	4.2	4.4	4.4	4.4	4.4	
500	1.8	2.7	3.1	4.0	4.1	4.3	4.3	4.3	4.3	
1,000	1.5	2.5	2.9	3.9	4.1	4.3	4.3	4.3	4.3	
2,000	1.3	2.2	2.7	3.7	4.0	4.2	4.2	4.2	4.2	
5,000	1.1	2.0	2.5	3.4	3.8	4.1	4.1	4.1	4.1	
10,000	0.9	1.8	2.4	3.2	3.7	3.9	4.0	4.0	4.0	
20,000	0.8	1.6	2.2	2.9	3.5	3.7	3.8	3.8	3.8	
50,000	0.6	1.2	1.8	2.4	3.0	3.2	3.3	3.3	3.3	
70,000	0.6	1.1	1.6	2.2	2.7	2.9	3.0	3.0	3.0	

STORM STUDIES - ISOHYETAL MAP

Storm of March 9-12, 1939 Assignment UMV 4-16Study Prepared by: Chicago, Ill. District
Great Lakes Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 3 - 10, 1902

Assignment GL 1 - 7

Location W. New York, N. Pa.

Study Prepared by:

Great Lakes Division

Buffalo District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/6/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/30/43Remarks: Centers at
Angelica, N.Y., Elba N.Y., and
Elmira, N.Y.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 7
 Form 5001-B (24-hour " ")----- 9
 Form 5001-D (" " " ")----- -
 Misl. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 10

PART II

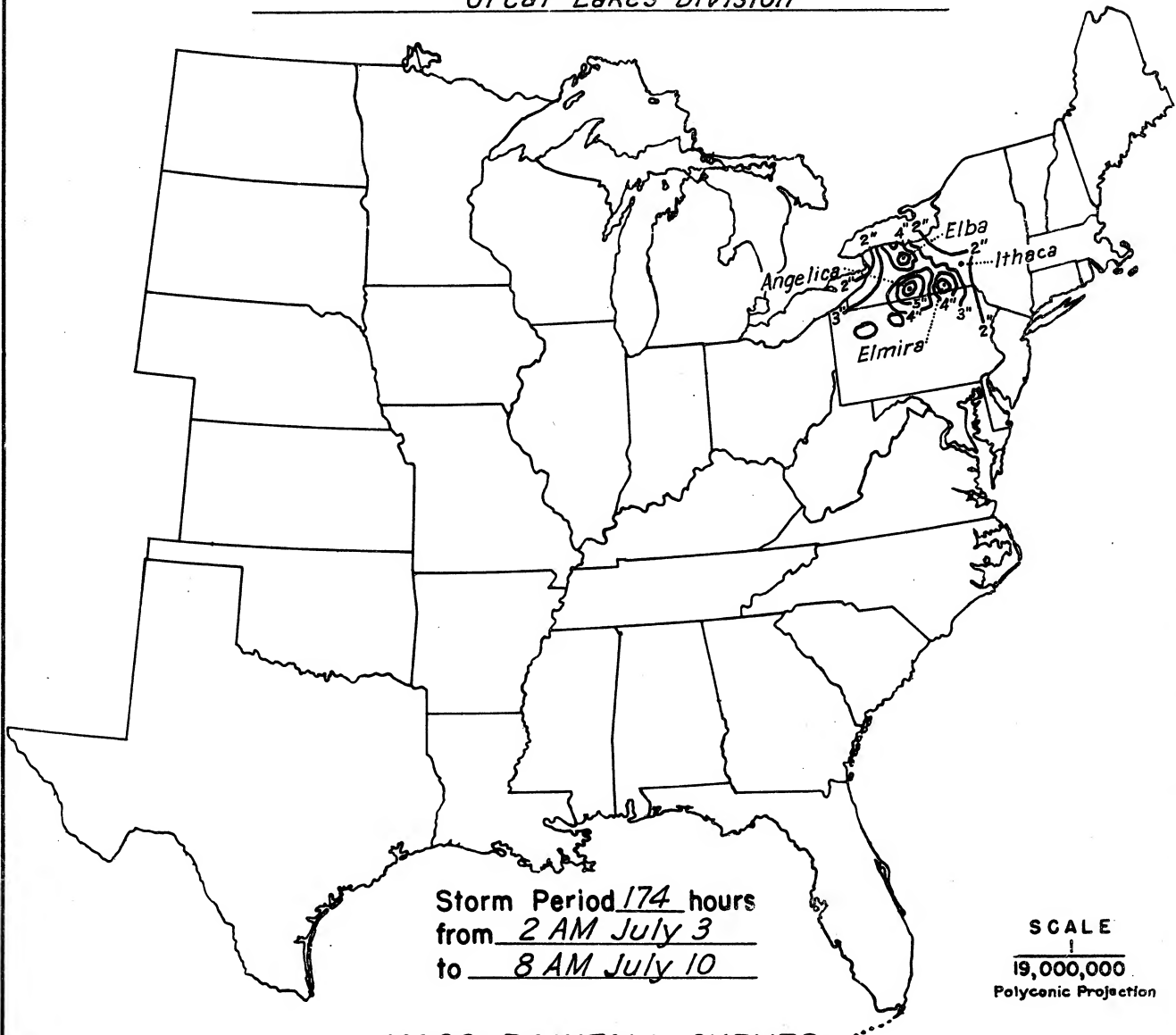
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 7
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

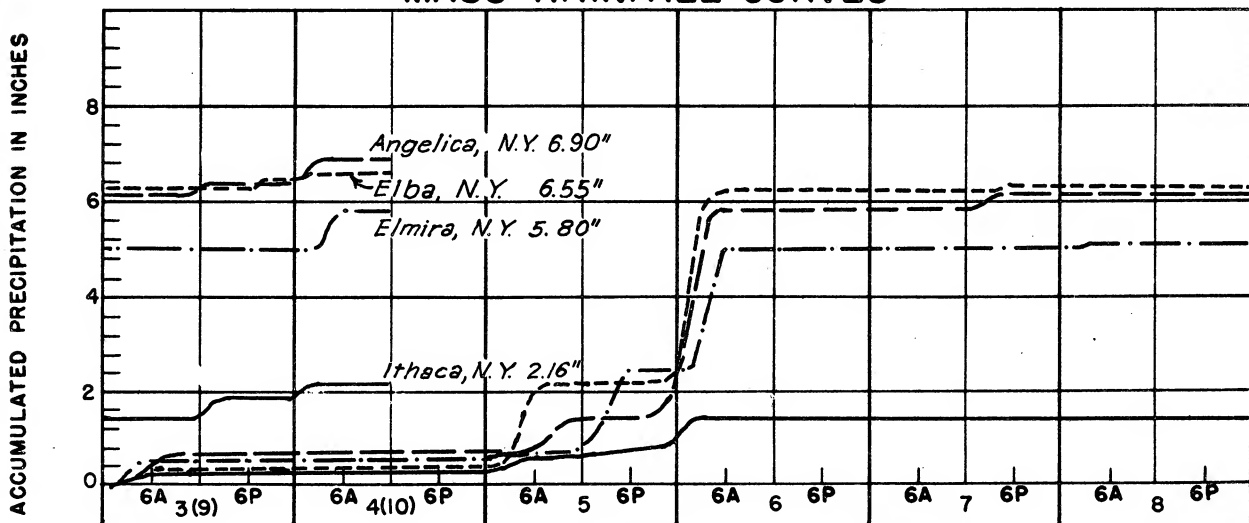
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	72	96	120	168	174
10	4.3	4.5	4.5	5.6	6.0	6.0	6.0	6.2	6.3	6.6	6.9
100	3.5	4.1	4.1	4.9	5.3	5.3	5.3	5.7	6.0	6.5	6.7
200	3.2	4.0	4.0	4.6	5.1	5.1	5.1	5.5	5.9	6.5	6.6
500	2.7	3.7	3.7	4.2	4.7	4.7	4.7	5.2	5.6	6.3	6.4
1,000	2.4	3.3	3.4	3.8	4.3	4.3	4.4	4.9	5.2	5.9	6.1
2,000	2.0	2.9	3.0	3.3	3.9	3.9	4.0	4.5	4.8	5.4	5.7
5,000	1.5	2.2	2.4	2.7	3.3	3.3	3.4	3.9	4.1	4.7	4.9
10,000	1.1	1.6	1.9	2.1	2.7	2.7	3.0	3.3	3.5	4.0	4.3
13,000	1.0	1.4	1.7	1.9	2.5	2.5	2.7	3.0	3.2	3.6	3.9

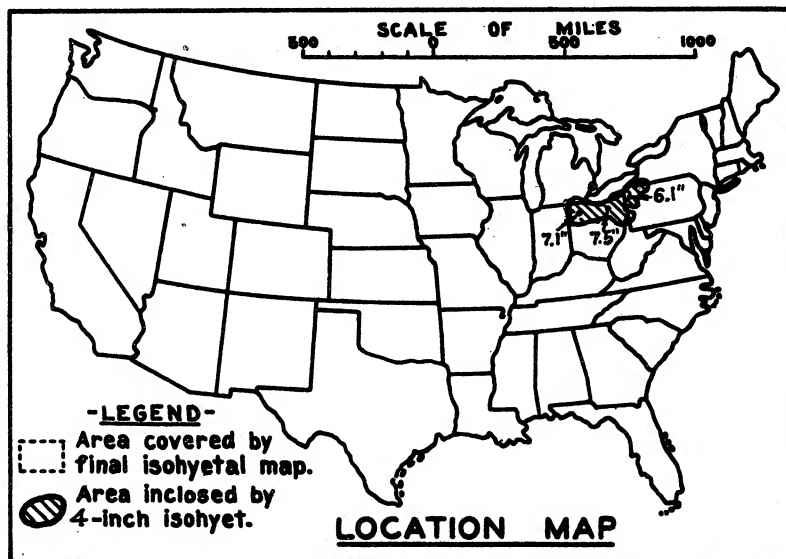
STORM STUDIES - ISOHYETAL MAP

Storm of July 3-10, 1902 Assignment GL 1-7
Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 25-30, 1903.

Assignment GL 1 - 9

Location Ohio

Study Prepared by:

Great Lakes Division
Buffalo District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 7/20/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/6/44Remarks: Centers at
Strongsville, Rocky Ridge and
Colebrook, Ohio**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	4
Miscl. precip. records, meteorological data, etc.-----	6
Form 5002 (Mass rainfall curves)-----	14

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

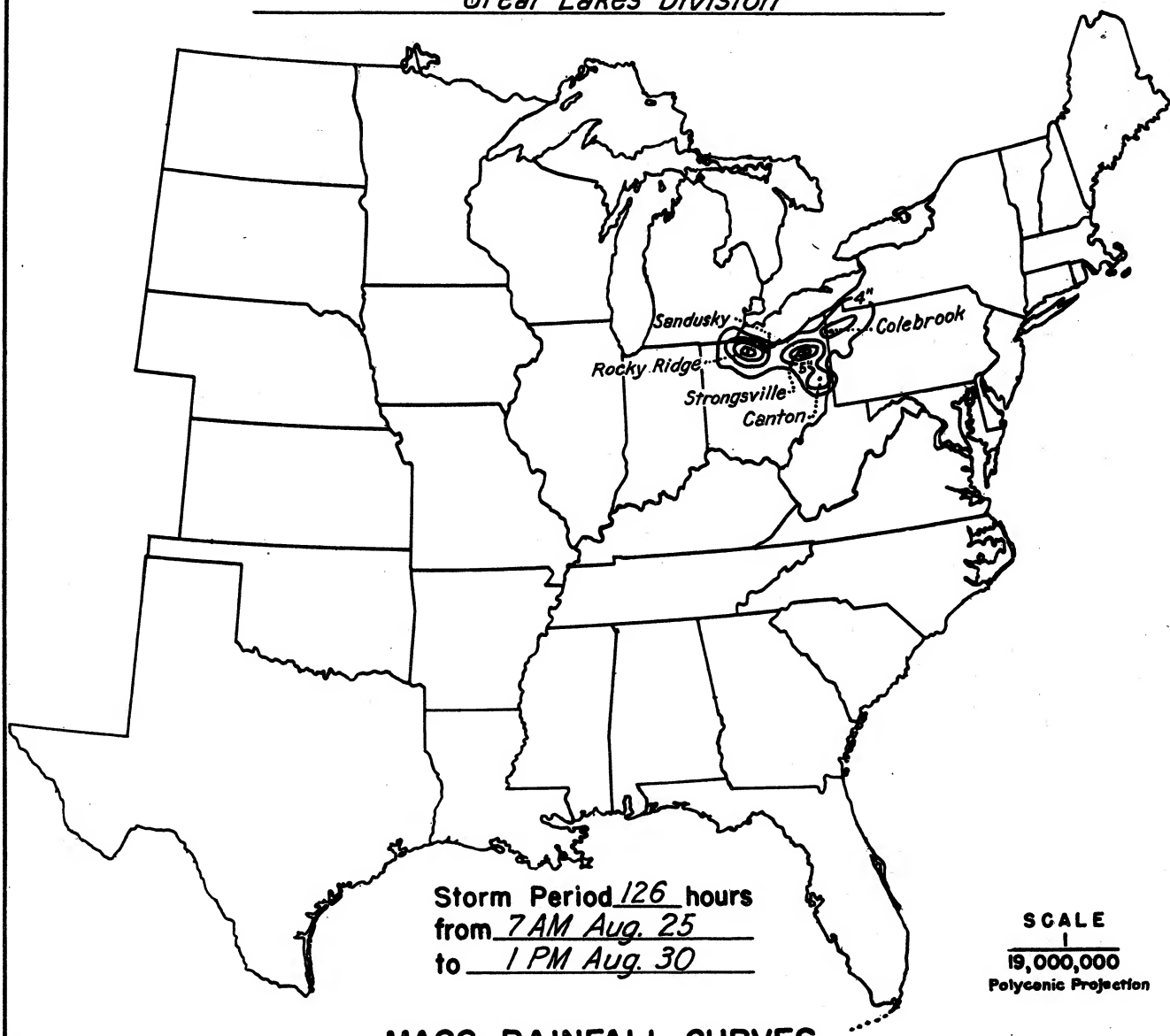
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

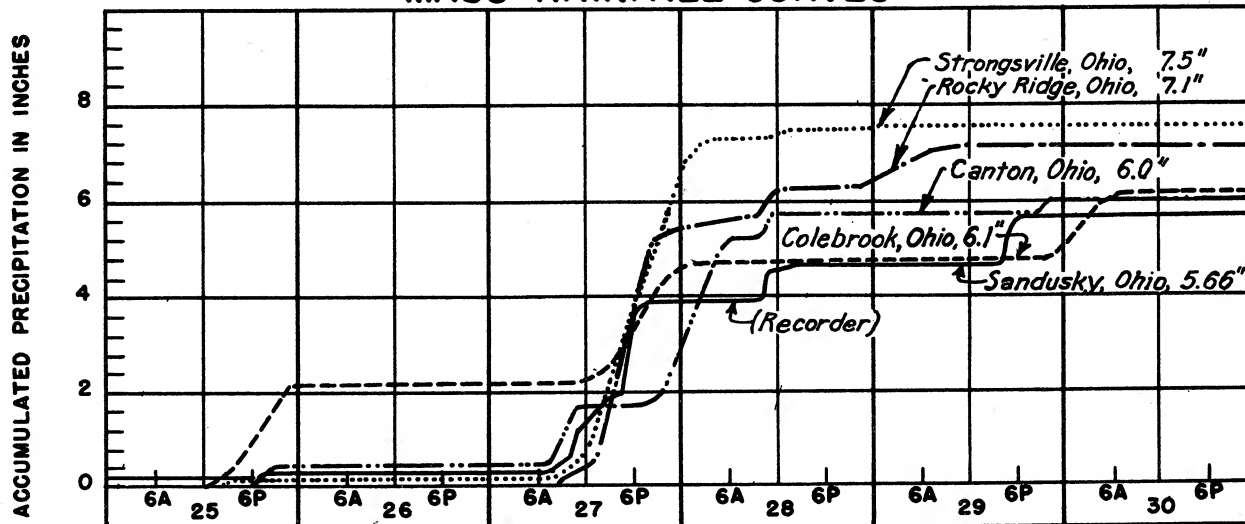
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	3.9	6.5	6.6	6.6	6.8	6.9	7.0	7.0	7.1	7.5	7.5
100	3.4	5.4	6.1	6.2	6.3	6.5	6.6	6.7	6.9	7.1	7.3
200	3.2	5.1	5.8	6.0	6.1	6.3	6.4	6.5	6.7	6.9	7.1
500	2.9	4.6	5.4	5.6	5.8	6.0	6.0	6.2	6.4	6.5	6.8
1,000	2.7	4.3	5.0	5.2	5.5	5.6	5.7	6.0	6.1	6.2	6.5
2,000	2.5	3.9	4.5	4.8	5.1	5.2	5.3	5.6	5.7	5.8	6.1
5,000	2.0	3.1	3.8	4.0	4.3	4.4	4.6	4.9	5.0	5.1	5.5
8,600	1.5	2.4	3.0	3.2	3.5	3.7	4.0	4.2	4.4	4.5	5.0

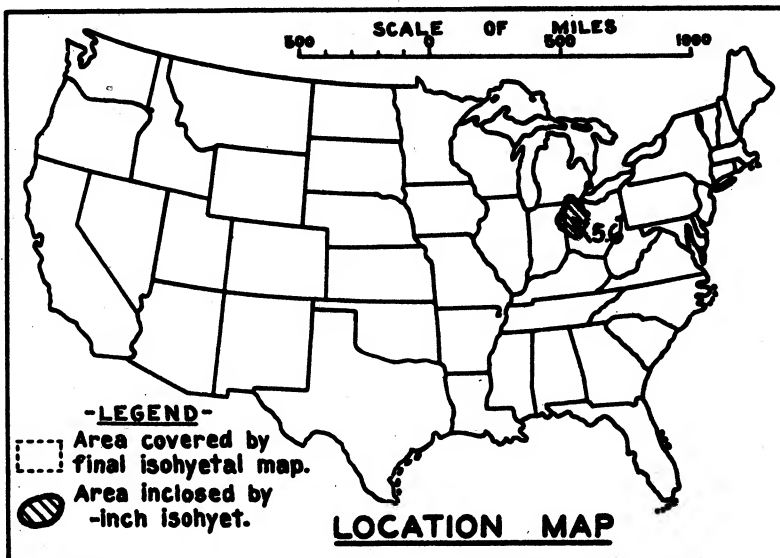
STORM STUDIES - ISOHYETAL MAP

Storm of August 25-30, 1903 Assignment GL. 1-9
Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 2 - 5, 1909

Assignment G L 1 - 11 A

Location N.W. Ohio & N.E. Indiana

Study Prepared by:

Great Lakes Division

Buffalo District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/9/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/11/44

Remarks: Centers at:

Benton Ridge and Defiance,
Ohio**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	7
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	2
Misc. precip. records, meteorological data, etc.....	2
Form 5002 (Mass rainfall curves).....	7

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

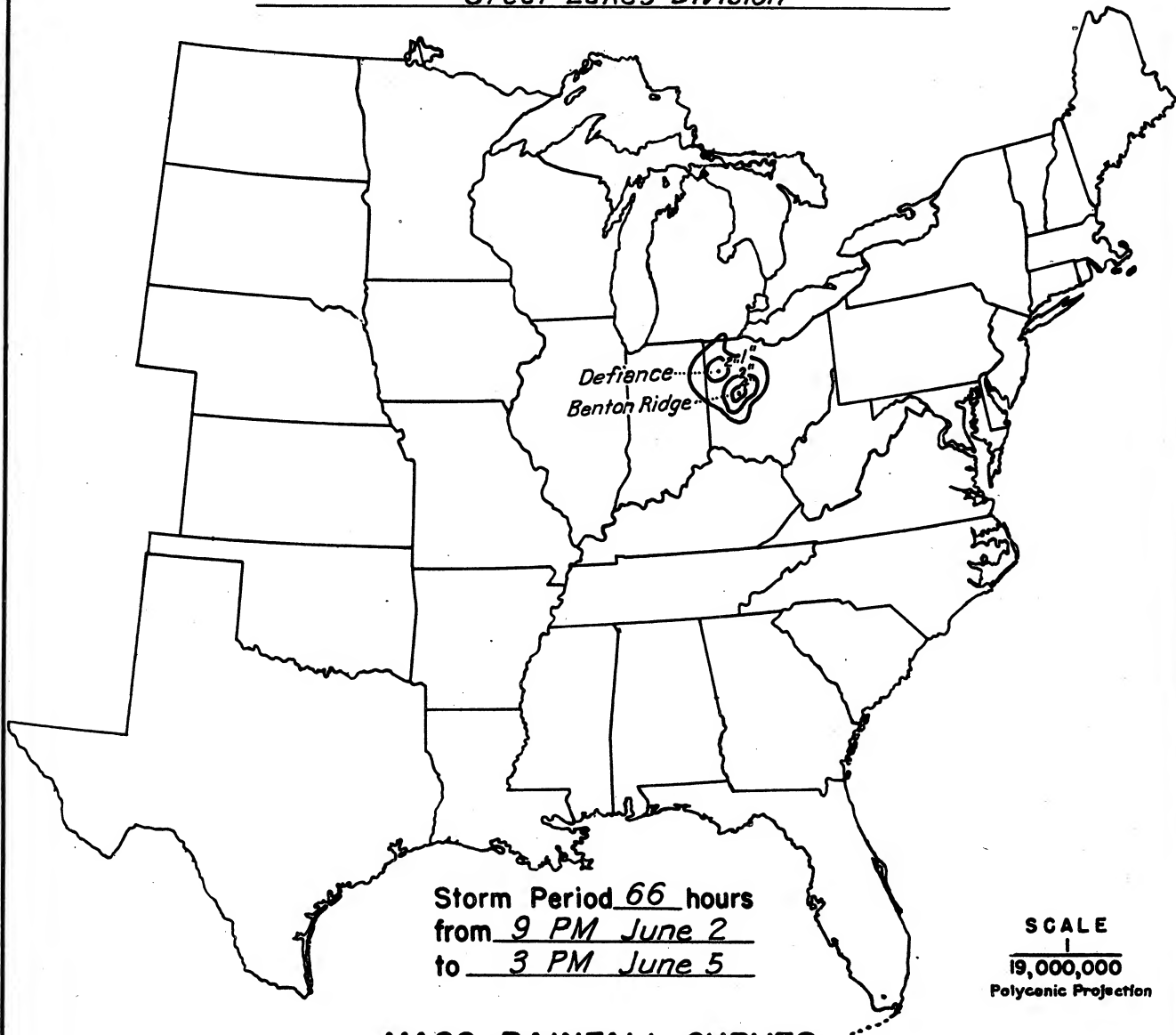
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	6
Maximum duration-depth-area curves.....	2
Data relating to periods of maximum rainfall.....	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

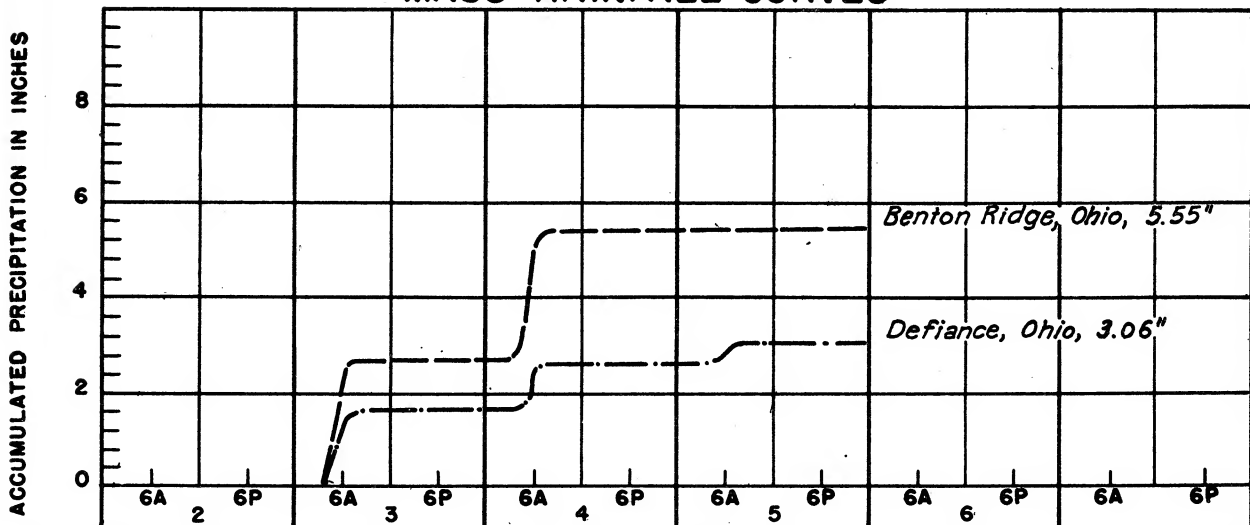
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	54	60	66
10	2.9	2.9	2.9	2.9	5.5	5.5	5.5	5.5	5.5	5.6
100	2.5	2.5	2.5	2.5	4.7	4.7	4.7	4.8	4.9	4.9
200	2.3	2.3	2.3	2.3	4.3	4.3	4.3	4.5	4.5	4.5
500	2.0	2.0	2.0	2.0	3.7	3.7	3.7	3.9	3.9	3.9
1,000	1.7	1.7	1.7	1.7	3.1	3.1	3.1	3.3	3.3	3.3
2,000	1.4	1.4	1.4	1.4	2.5	2.5	2.5	2.7	2.7	2.7
4,430	1.1	1.1	1.1	1.1	1.8	1.8	1.8	2.0	2.0	2.0

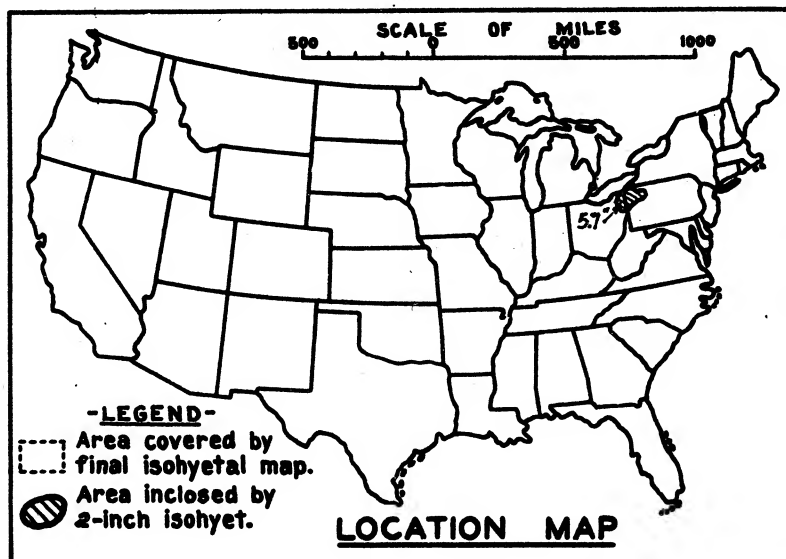
STORM STUDIES - ISOHYETAL MAP

Storm of June 2-5, 1909 Assignment GL 1-11 (A)
Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 2 - 5, 1909

Assignment G L 1 - 11 B

Location Northeastern Ohio &

Study Prepared by: N.W. Pa.

Great Lakes Division

Buffalo District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/9/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/11/44

Remarks: Center at:

Rome, Ohio

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	2
Misc. precip. records, meteorological data, etc.-----	2
Form 5002 (Mass rainfall curves)-----	7

PART II

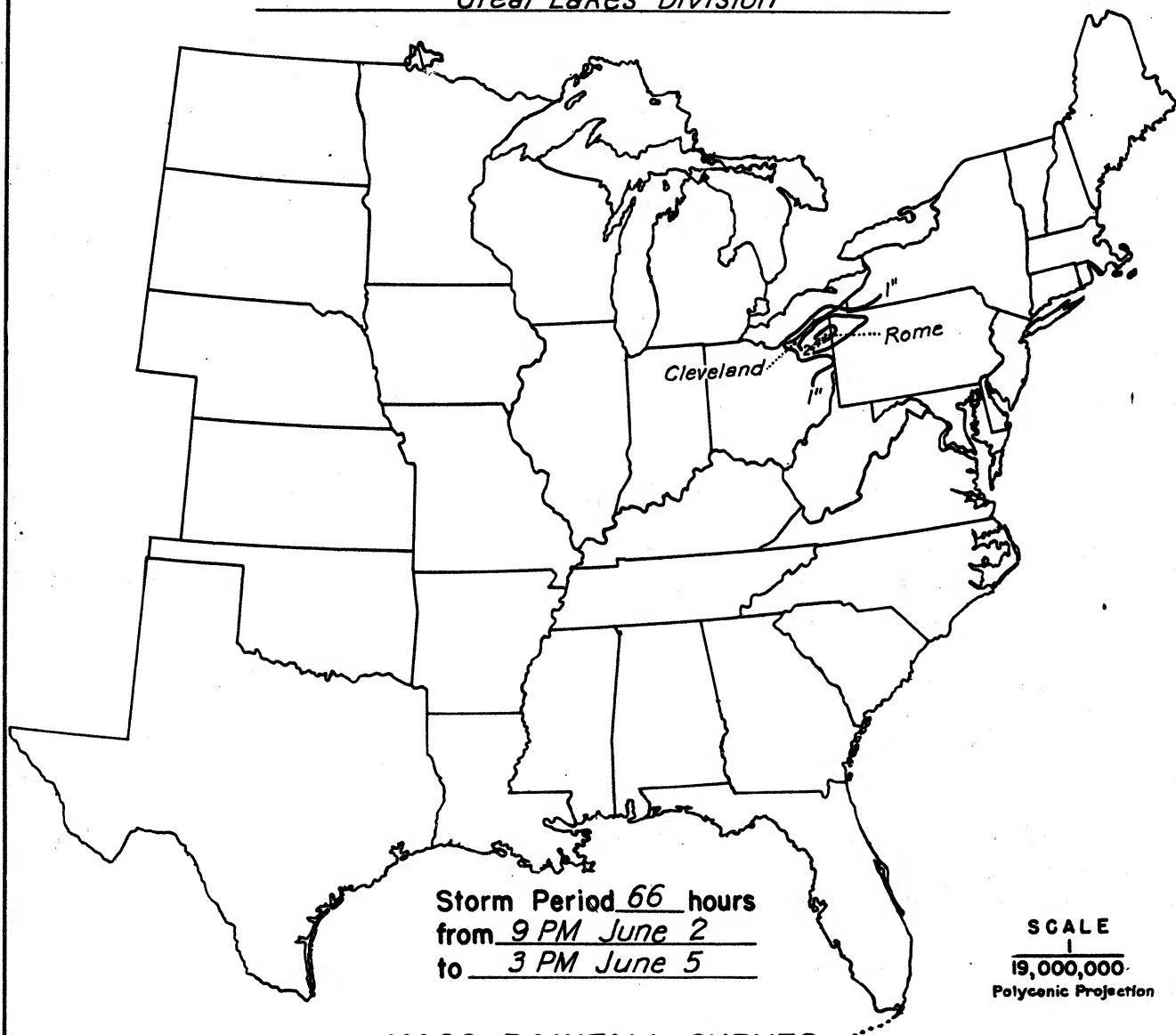
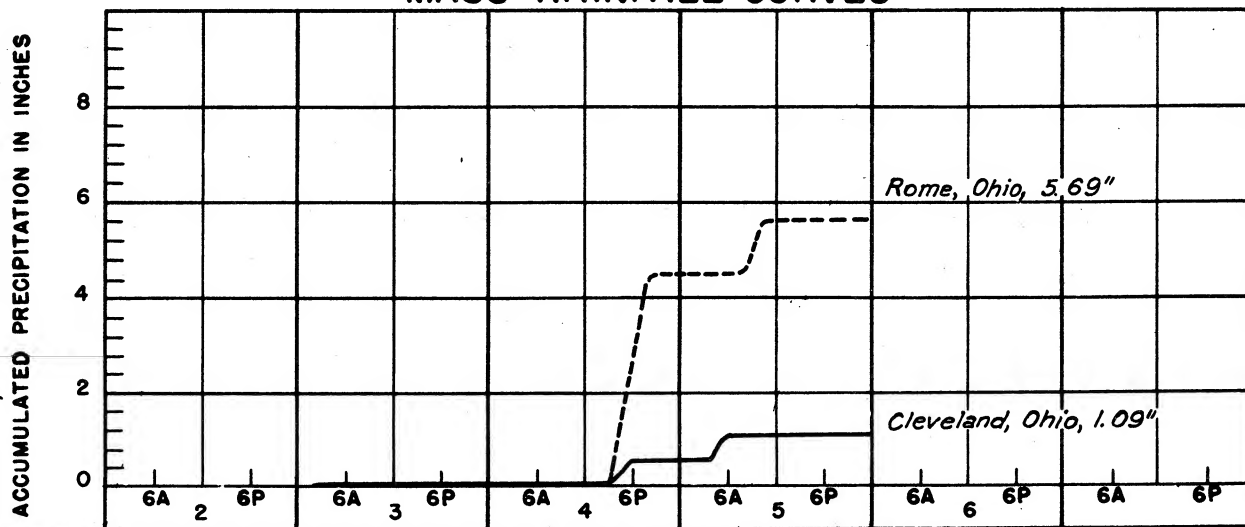
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

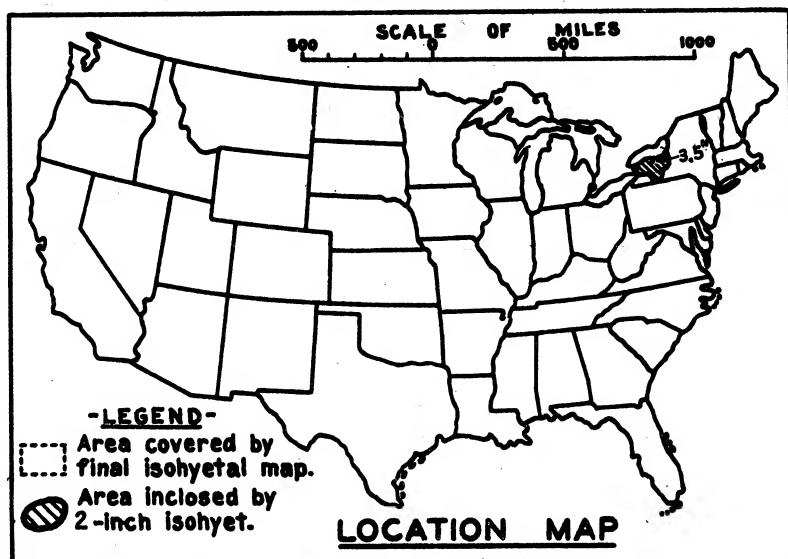
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	54	60	66
10	4.6	4.6	5.4	5.7	5.7	5.7	5.7	5.7	5.7	5.7
100	4.1	4.2	4.4	5.1	5.1	5.1	5.1	5.1	5.1	5.1
200	3.8	4.0	4.1	4.9	4.9	4.9	4.9	4.9	4.9	4.9
500	3.3	3.5	3.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1,000	2.8	3.0	3.1	3.7	3.7	3.7	3.7	3.7	3.7	3.7
2,000	2.1	2.3	2.4	2.9	3.0	3.0	3.0	3.0	3.0	3.0
3,725	1.5	1.6	1.8	2.2	2.3	2.3	2.3	2.3	2.3	2.3

STORM STUDIES - ISOHYETAL MAPStorm of June 2-5, 1909 Assignment GL 1-II (B)Study Prepared by: Buffalo, N.Y. District
Great Lakes Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of June 2 - 5, 1916

Assignment GL 1 - 16

Location W. New York

Study Prepared by:

Great Lakes Division
Buffalo District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 7/15/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/6/44Remarks: Center at
Brockport, New York**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	6
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	3
Misc. precip. records, meteorological data, etc.....	6
Form 5002 (Mass rainfall curves).....	10

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

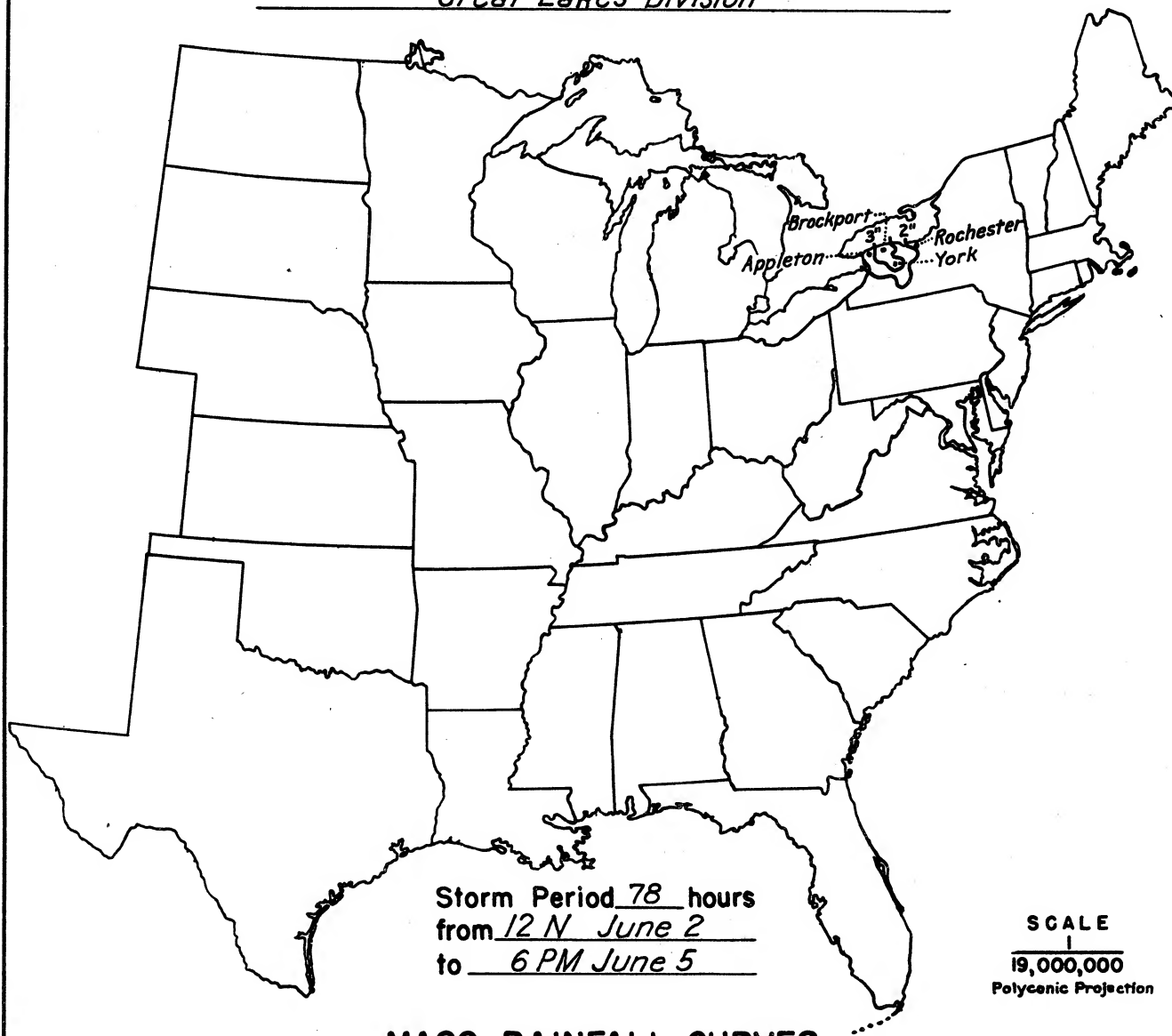
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	1
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

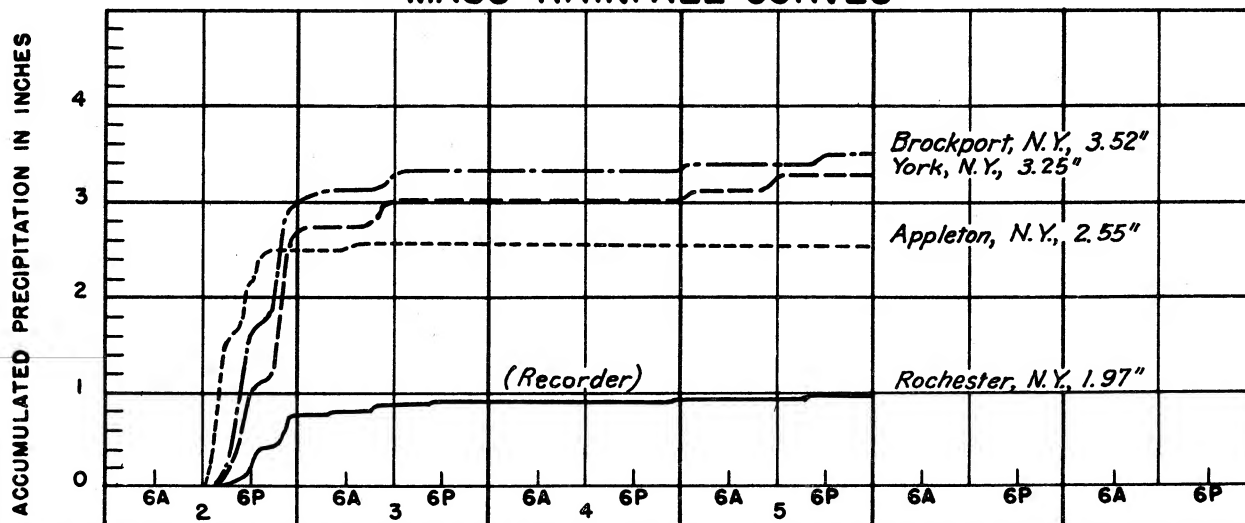
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	78
10	2.8	3.1	3.2	3.4	3.4	3.4	3.4	3.4	3.4	3.5
100	2.2	3.0	3.1	3.3	3.3	3.3	3.3	3.3	3.4	3.5
200	2.0	2.9	3.0	3.3	3.3	3.3	3.3	3.3	3.3	3.5
500	1.7	2.8	2.9	3.2	3.2	3.2	3.2	3.2	3.3	3.4
1,000	1.6	2.6	2.8	3.0	3.0	3.0	3.0	3.0	3.2	3.3
2,000	1.4	2.5	2.6	2.8	2.8	2.8	2.8	2.8	2.9	3.0
3,800	1.2	2.2	2.3	2.5	2.5	2.5	2.5	2.5	2.6	2.7

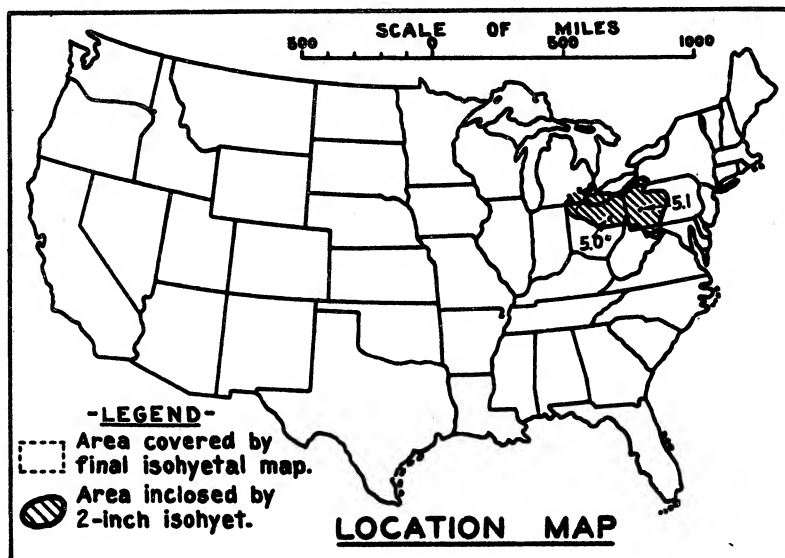
STORM STUDIES - ISOHYETAL MAP

Storm of June 2-5, 1916 Assignment GL. 1-16
Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 15 - 18, 1920

Assignment GL 1 - 18

Location Pa., Ohio, & Mich.

Study Prepared by:

Great Lakes Division
Buffalo District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 7/14/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/6/44Remarks: Centers at
W. Newton, Pa., Millport,
Ohio, Fremont, Ohio, and
Ebensburg, Pa.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	14
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	6
Miscl. precip. records, meteorological data, etc.....	13
Form 5002 (Mass rainfall curves).....	20

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

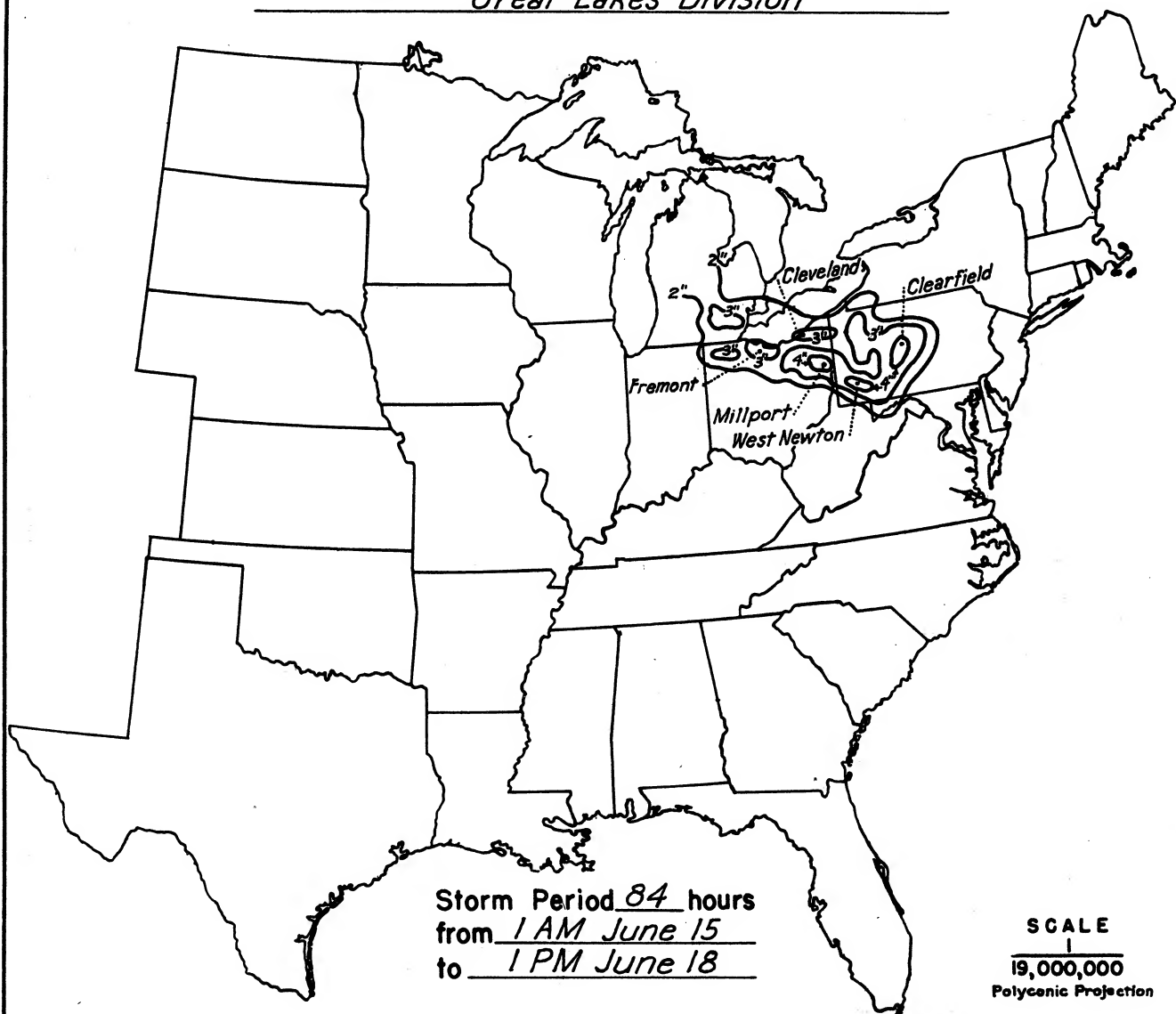
Form S-10 (Data from mass rainfall curves).....	3
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	8
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

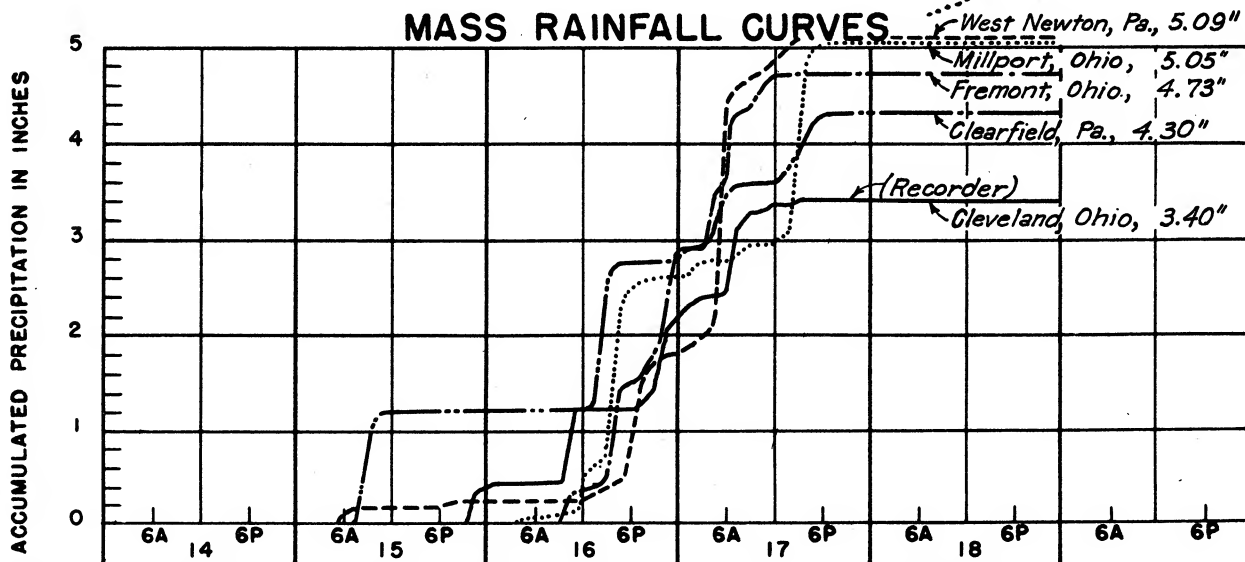
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	2.4	3.6	4.0	4.6	5.0	5.0	5.0	5.1	5.1	5.1
100	2.3	3.0	3.6	4.2	4.8	4.8	4.8	4.9	4.9	4.9
200	2.2	2.8	3.5	4.1	4.7	4.7	4.8	4.8	4.8	4.8
500	2.1	2.5	3.3	3.9	4.5	4.6	4.6	4.7	4.7	4.7
1,000	2.0	2.3	3.1	3.8	4.4	4.5	4.5	4.5	4.6	4.6
2,000	1.9	2.1	3.0	3.6	4.1	4.2	4.4	4.4	4.4	4.4
5,000	1.6	1.8	2.7	3.3	3.7	3.9	4.0	4.1	4.1	4.1
10,000	1.2	1.6	2.4	3.0	3.3	3.5	3.7	3.8	3.9	3.9
20,000	0.8	1.3	2.0	2.5	2.8	3.0	3.2	3.4	3.4	3.4
30,000	0.6	1.2	1.8	2.2	2.4	2.6	2.8	3.0	3.1	3.1

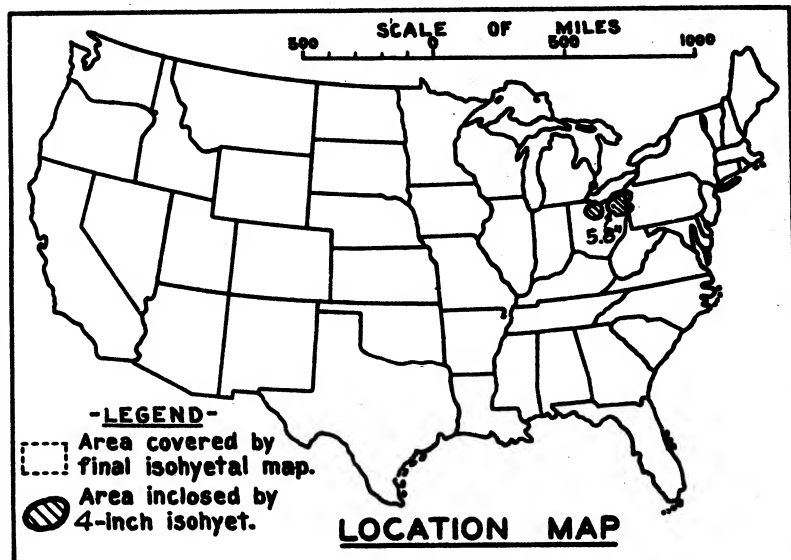
STORM STUDIES - ISOHYETAL MAP

Storm of June 15-18, 1920 Assignment GL 1-18
Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 24 - 29, 1924

Assignment GL 1 - 20

Location N. Ohio & W. Penn.

Study Prepared by:

Great Lakes Division
Buffalo District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 7/8/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/6/44Remarks: Centers at
Oberlin, Akron and Fremont,
Ohio, and Franklin, Pa.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	19
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	11
Form 5002 (Mass rainfall curves)-----	14

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

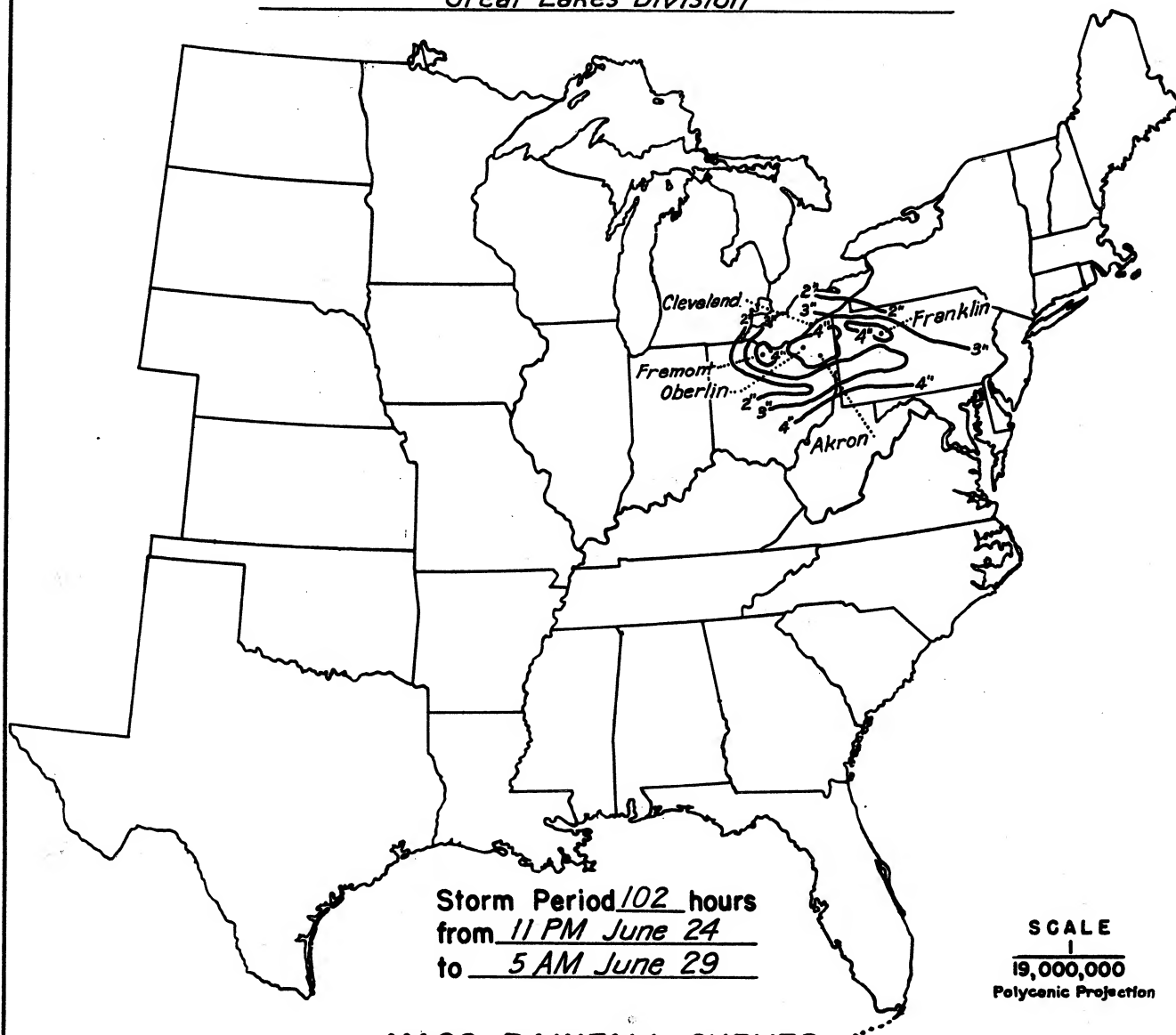
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

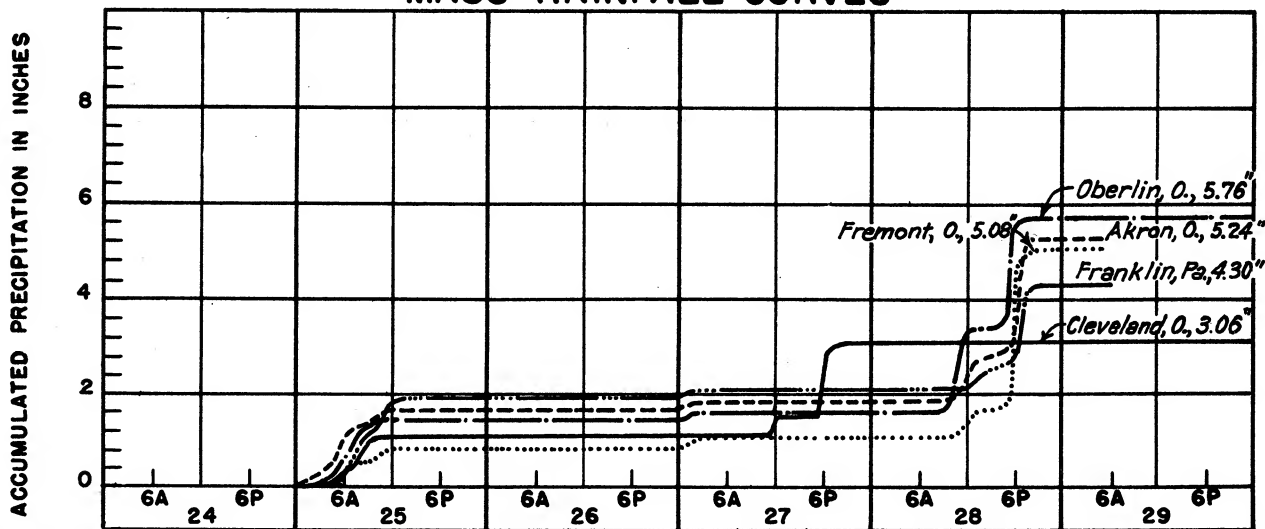
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	102
10	3.5	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.4	5.8	5.8
100	3.3	4.2	4.2	4.2	4.2	4.2	4.3	4.3	4.3	5.5	5.5
200	3.1	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2	5.4	5.4
500	2.9	3.7	3.8	3.8	3.8	3.8	3.9	3.9	4.0	5.1	5.1
1,000	2.7	3.3	3.5	3.6	3.6	3.6	3.6	3.7	3.7	4.9	4.9
2,000	2.4	3.0	3.2	3.2	3.2	3.2	3.3	3.4	3.4	4.7	4.7
5,000	1.9	2.5	2.7	2.7	2.7	2.7	2.8	2.8	2.8	4.3	4.3
9,000	1.5	2.1	2.3	2.3	2.3	2.3	2.4	2.4	2.4	3.9	3.9

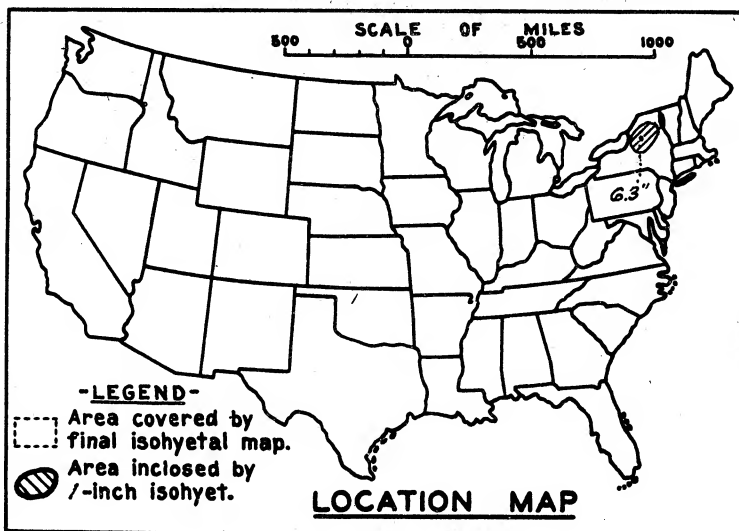
STORM STUDIES - ISOHYETAL MAP

Storm of June 24-29, 1924 Assignment GL 1-20
Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 18-20 October 1930

Assignment, G L 1 - 26

Location, Northern New York

Study Prepared by:

Great Lakes Division

Buffalo District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5/18/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/9/46

Remarks: Center at

Pittsburg, N. Y.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	3
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	1
Miscl. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	2

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

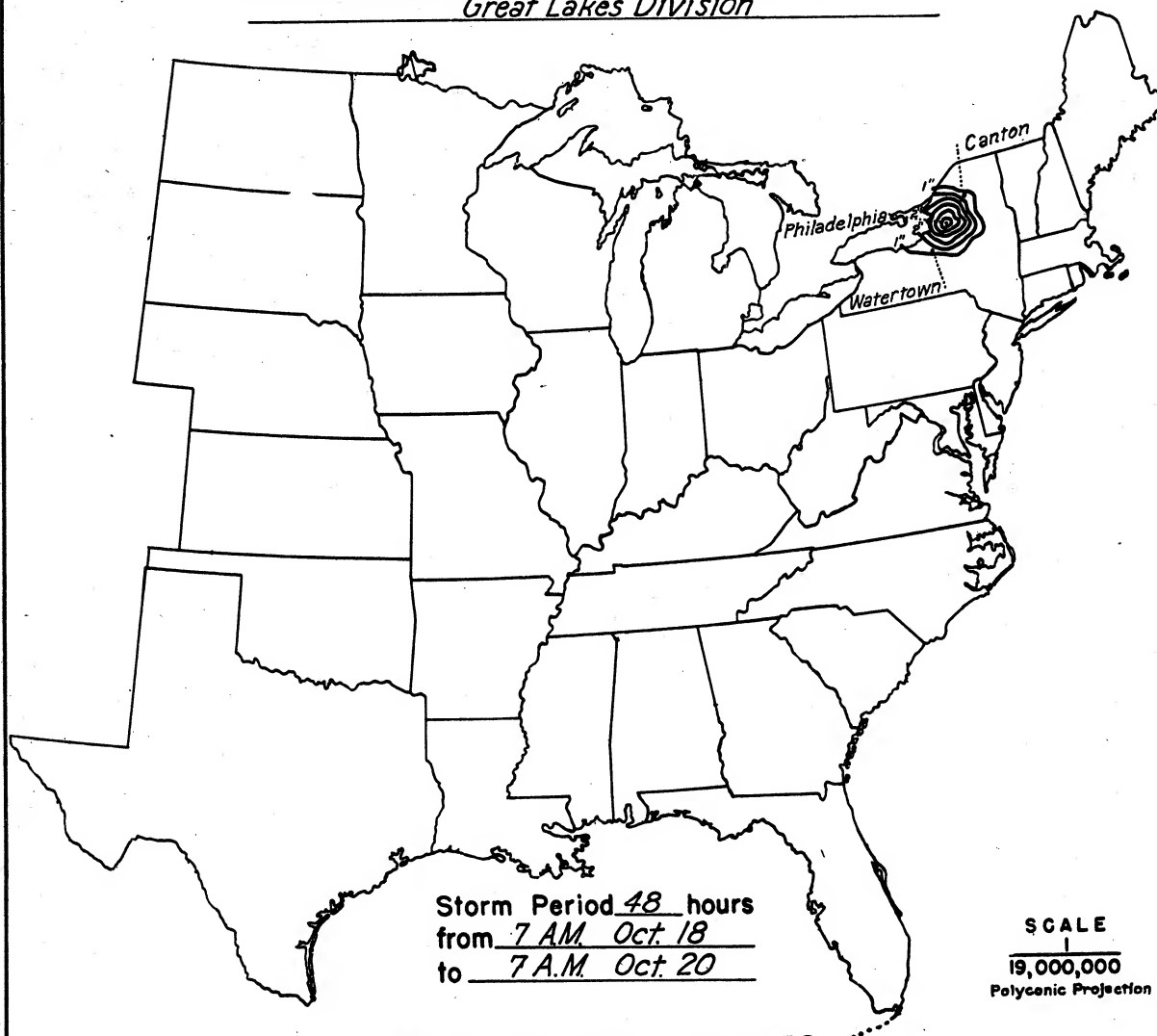
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	2
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

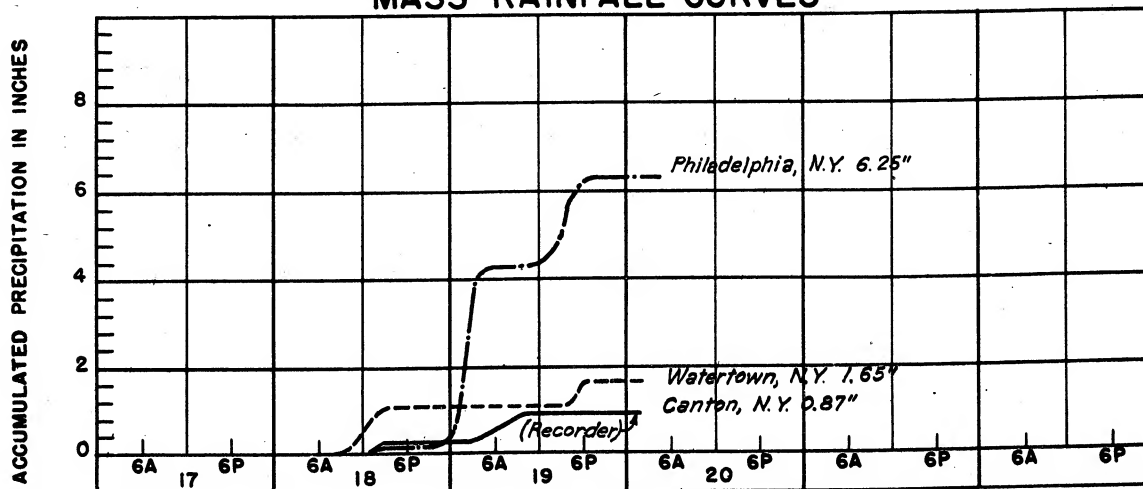
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	3.9	4.9	6.0	6.0	6.1	6.3	6.3					
100	2.9	4.2	5.2	5.4	5.5	5.7	5.7					
200	2.5	3.7	4.7	5.0	5.2	5.3	5.4					
500	2.0	3.1	3.9	4.3	4.4	4.5	4.7					
1,000	1.5	2.4	3.0	3.4	3.5	3.6	3.9					
2,000	0.9	1.5	1.8	2.1	2.4	2.6	3.0					
2,500	0.7	1.1	1.4	1.7	2.0	2.2	2.6					

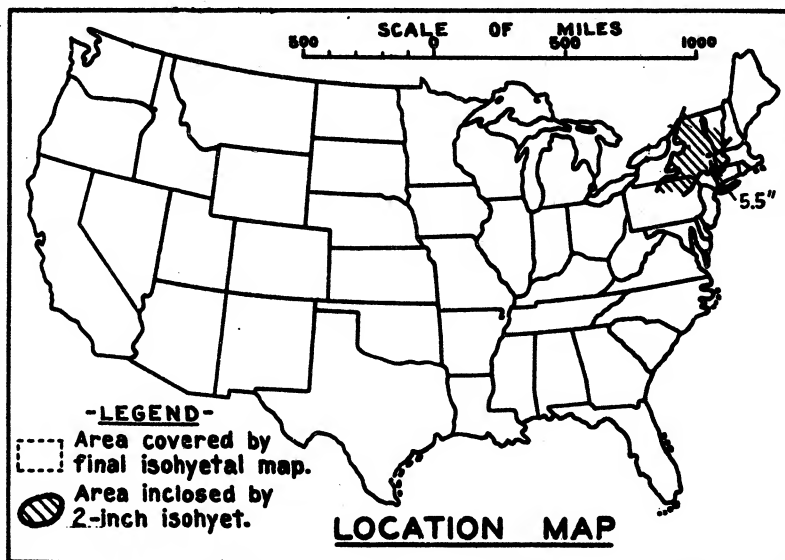
STORM STUDIES - ISOHYETAL MAP

Storm of October 18-20, 1930 Assignment GL 1-26
Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 20 - 25, 1931

Assignment GL 1 - 27

Location New York

Study Prepared by:

Great Lakes Division

Buffalo District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 9/10/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/6/44Remarks: Centers at
Conklingville, Ballston,
Raquette Lake and Eagle Falls.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000.

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	18
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	5
Miscl. precip. records, meteorological data, etc.....	5
Form 5002 (Mass rainfall curves).....	17

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

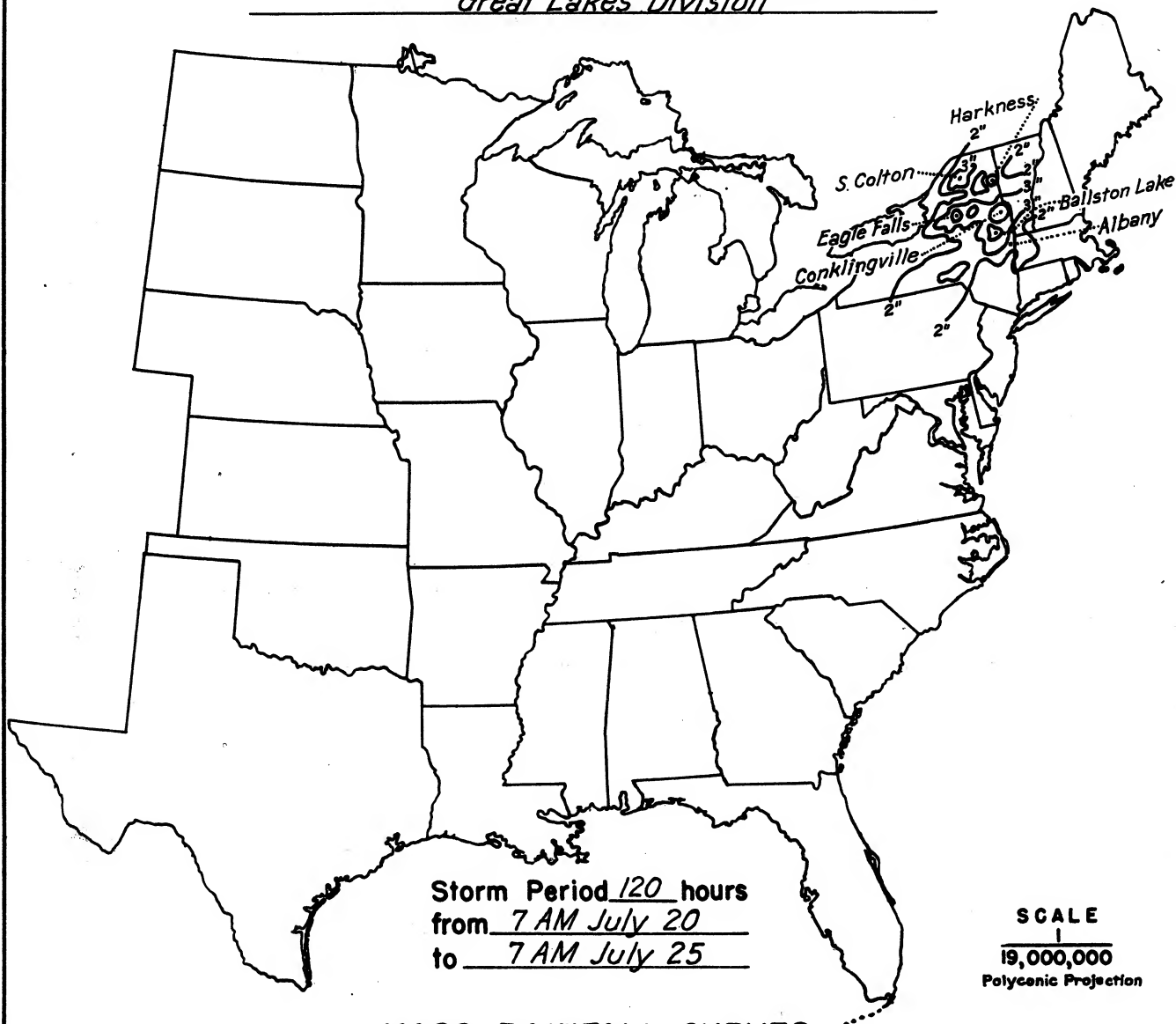
Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	10
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

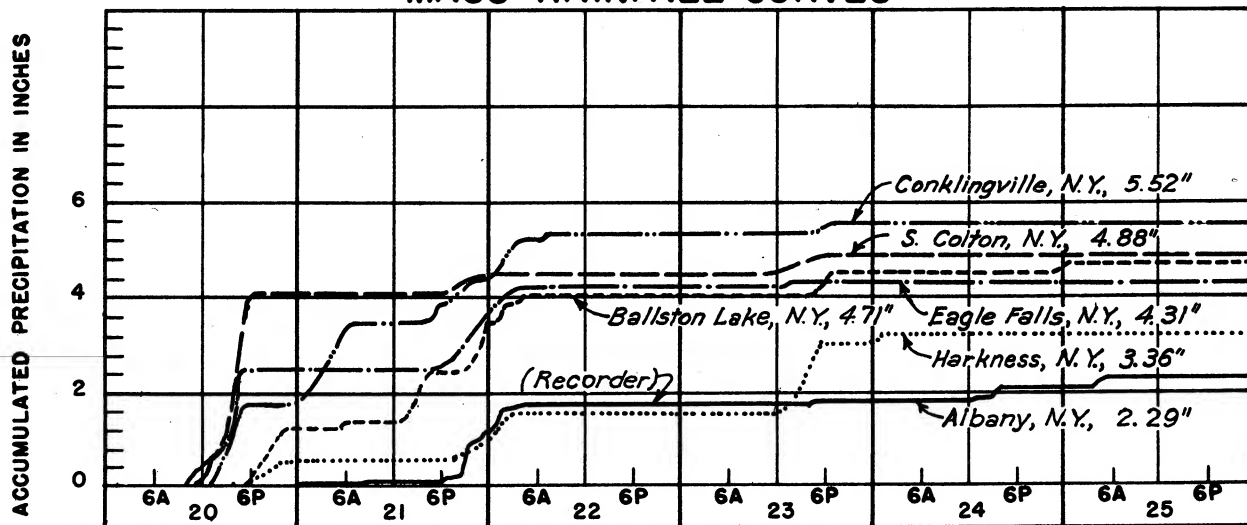
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	78	84	120
10	4.0	4.0	4.0	4.0	4.0	5.2	5.4	5.4	5.4	5.5	5.5
100	3.2	3.8	3.8	3.8	3.8	5.0	5.2	5.2	5.2	5.4	5.4
200	3.0	3.7	3.7	3.7	3.7	4.8	5.1	5.1	5.1	5.2	5.2
500	2.6	3.4	3.4	3.4	3.5	4.5	4.7	4.7	4.7	4.8	4.9
1,000	2.3	3.1	3.1	3.1	3.2	4.1	4.4	4.4	4.4	4.5	4.6
2,000	2.0	2.7	2.7	2.8	2.9	3.7	4.0	4.0	4.1	4.2	4.3
5,000	1.6	2.1	2.2	2.3	2.4	3.2	3.5	3.5	3.6	3.7	3.9
10,000	1.3	1.6	1.8	1.8	2.0	2.7	3.1	3.1	3.2	3.3	3.5
17,000	1.0	1.2	1.4	1.5	1.7	2.4	2.7	2.7	2.9	3.0	3.1

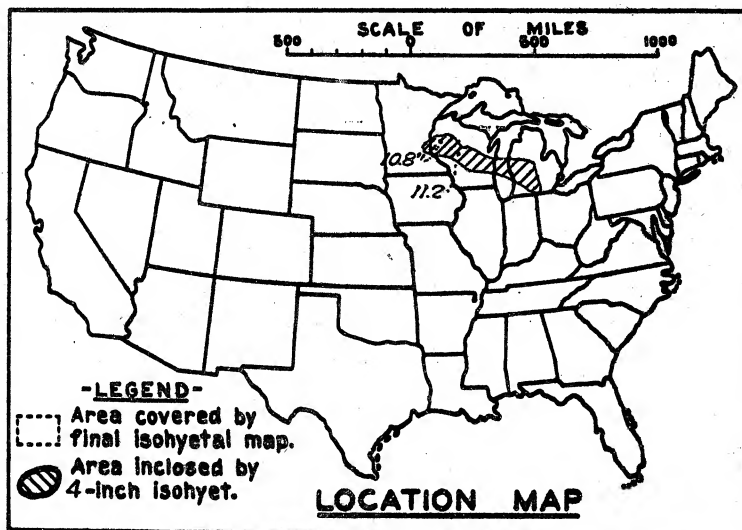
STORM STUDIES - ISOHYETAL MAP

Storm of July 20-25, 1931 Assignment GL 1-27
 Study Prepared by: Buffalo, N.Y. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 3-8 June 1905

Assignment G L 2 - 12

Location Minn., Wis., Mich., Ohio

Study Prepared by:

Great Lakes Division

Milwaukee District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6-17-40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12-6-45

Remarks: Centers at

Medford and Barron, Wis.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary Isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	16
Form 5001-B (24-hour " ").....	—
Form 5001-D (" " " ").....	10
Misc. precip. records, meteorological data, etc.....	20
Form 5002 (Mass rainfall curves).....	29

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

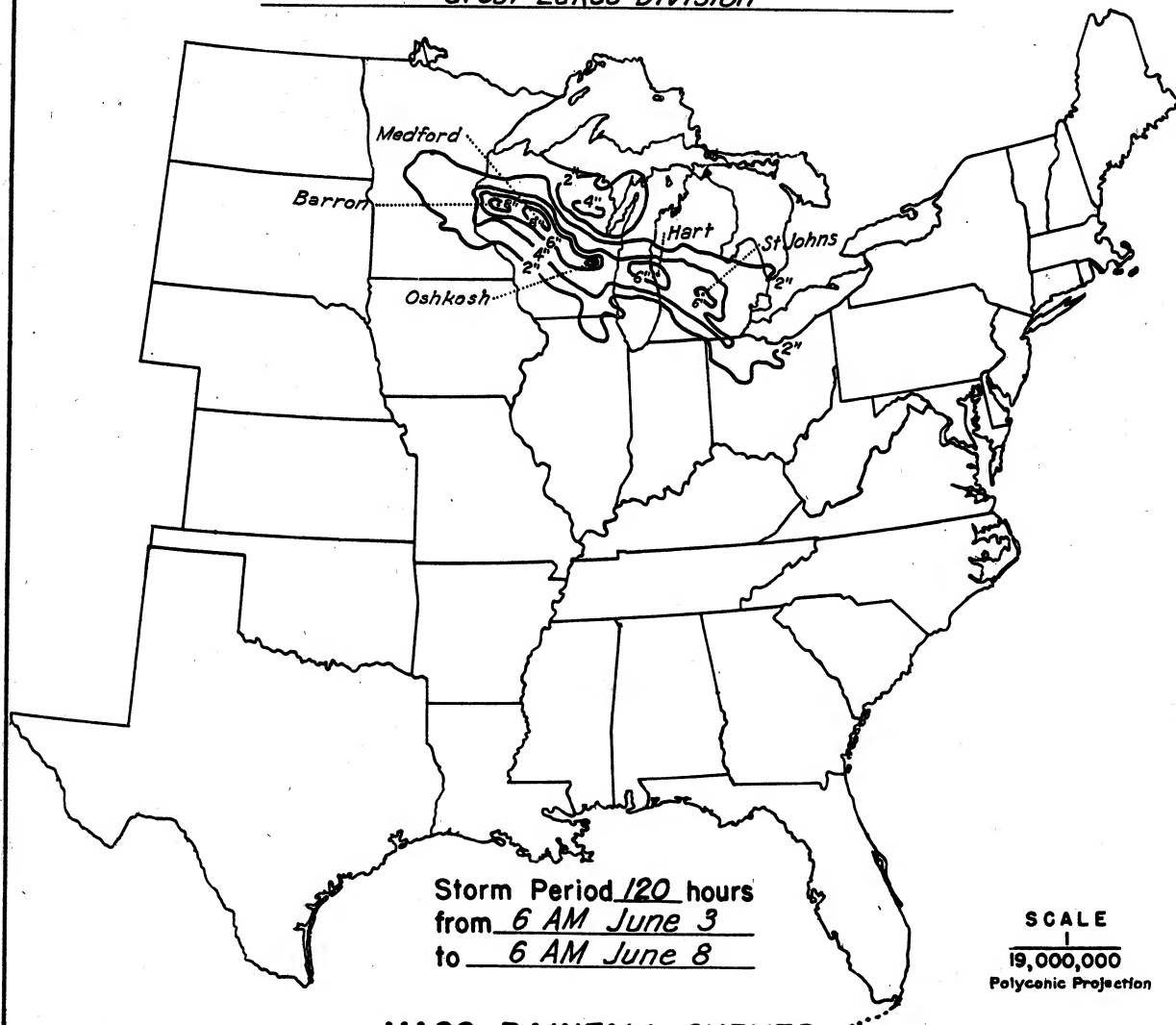
Form S-10 (Data from mass rainfall curves).....	4
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	8
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

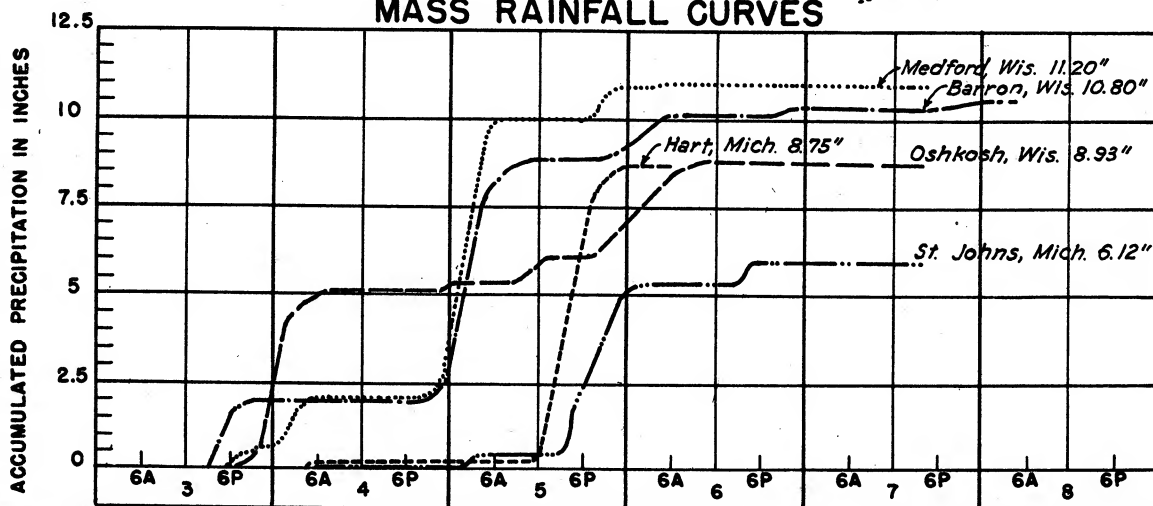
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	7.2	8.4	8.5	8.9	9.1	9.9	10.5	11.2	11.2	11.2	11.2
100	6.8	8.1	8.3	8.5	8.7	9.6	10.1	10.7	10.7	10.7	10.7
200	6.6	7.8	8.0	8.2	8.5	9.2	9.9	10.5	10.5	10.5	10.5
500	6.0	7.0	7.1	7.6	8.1	8.6	9.3	9.9	9.9	9.9	9.9
1,000	5.4	6.2	6.4	7.0	7.6	8.0	8.7	9.3	9.3	9.3	9.3
2,000	4.7	5.5	5.7	6.4	7.0	7.4	8.0	8.6	8.6	8.7	8.7
5,000	3.8	4.5	4.8	5.5	6.1	6.5	7.0	7.6	7.7	7.8	7.8
10,000	3.1	3.8	4.0	4.8	5.4	5.8	6.2	6.9	7.0	7.1	7.1
20,000	2.4	3.0	3.3	4.1	4.8	5.1	5.3	6.1	6.2	6.3	6.3
50,000	1.5	2.1	2.4	2.9	3.5	3.6	4.0	4.5	4.7	4.8	4.8
67,000	1.2	1.8	2.1	2.4	3.0	3.1	3.3	3.8	4.0	4.2	4.2

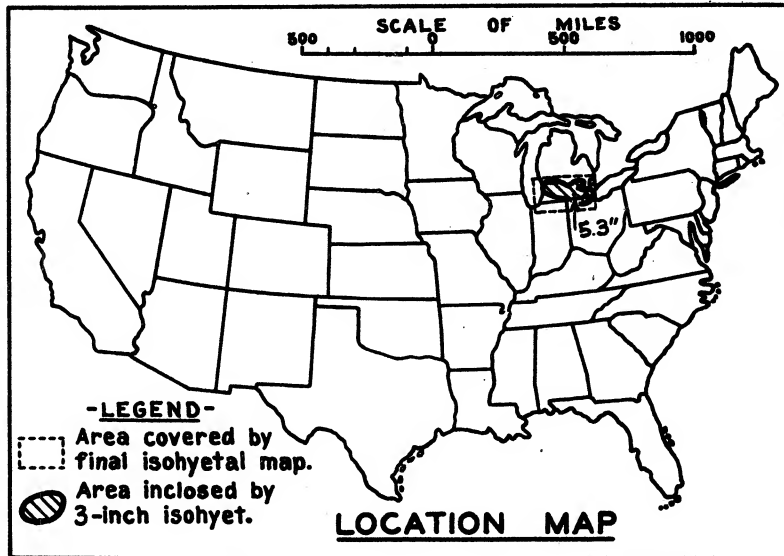
STORM STUDIES - ISOHYETAL MAP

Storm of June 3-8, 1905 Assignment GL 2-12
Study Prepared by: Milwaukee, Wis. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 10-12, 1914
 Assignment GL 2-15
 Location Southern Michigan
 Study Prepared by:
 Great Lakes Division
 Detroit District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/3/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/27/44.

Remarks: Centers at
 Adrian, Mich. and
 Kalamazoo, Mich.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	4
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	10

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

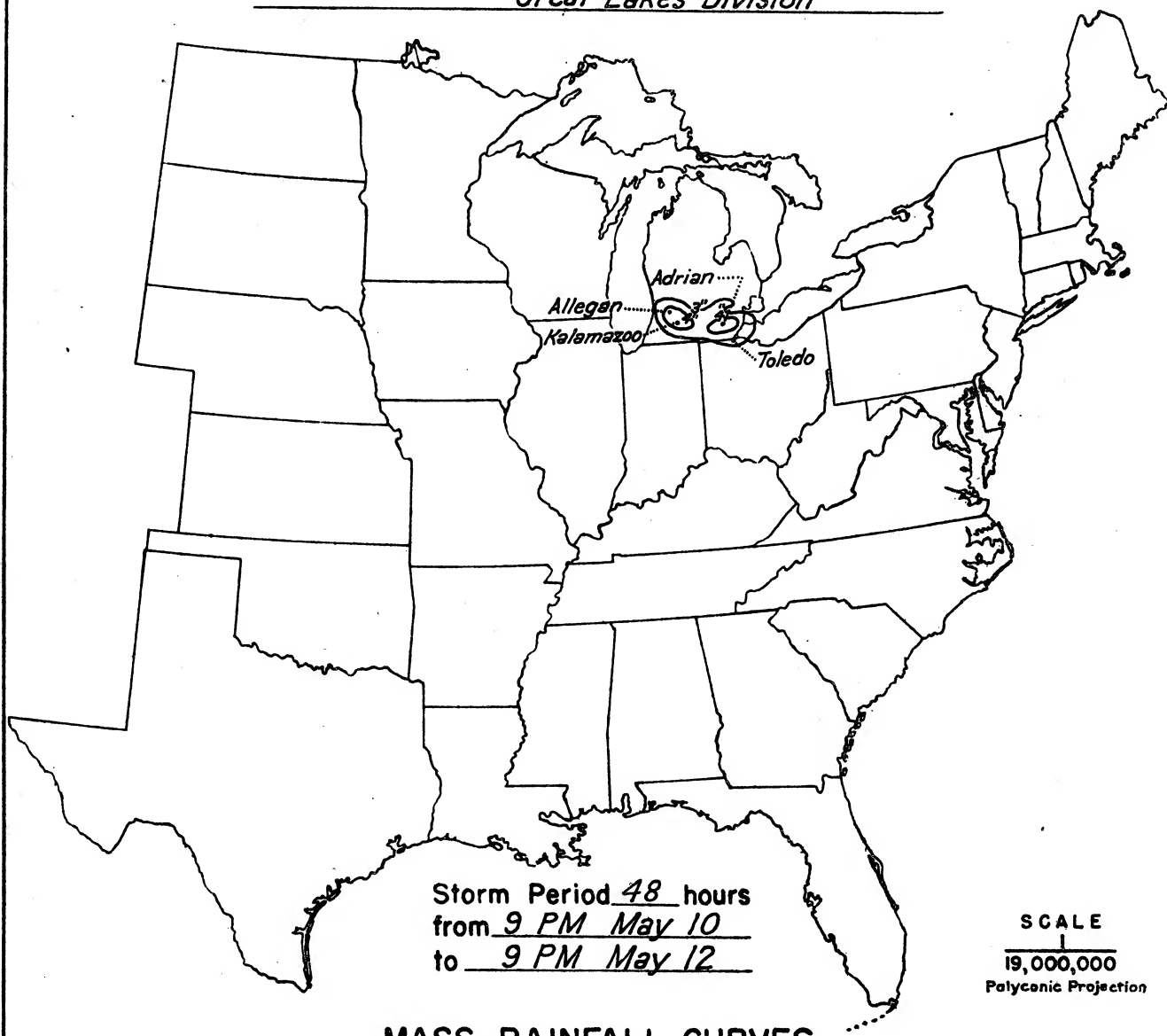
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

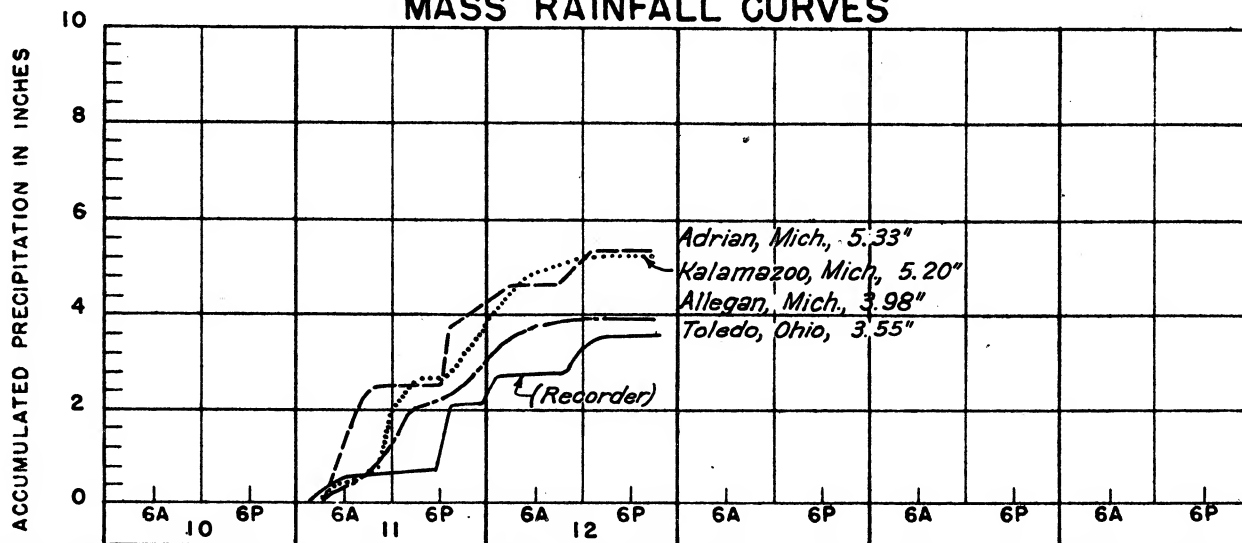
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	2.3	2.7	4.2	4.5	5.0	5.3	5.3					
100	2.0	2.6	3.8	4.4	4.8	5.2	5.2					
200	1.9	2.5	3.7	4.4	4.8	5.2	5.2					
500	1.8	2.4	3.6	4.3	4.6	5.0	5.1					
1000	1.7	2.3	3.4	4.1	4.4	4.8	4.8					
2000	1.6	2.1	3.1	3.8	4.1	4.5	4.6					
5000	1.3	1.9	2.6	3.3	3.7	4.0	4.2					
8900	1.0	1.7	2.3	3.0	3.2	3.6	3.8					

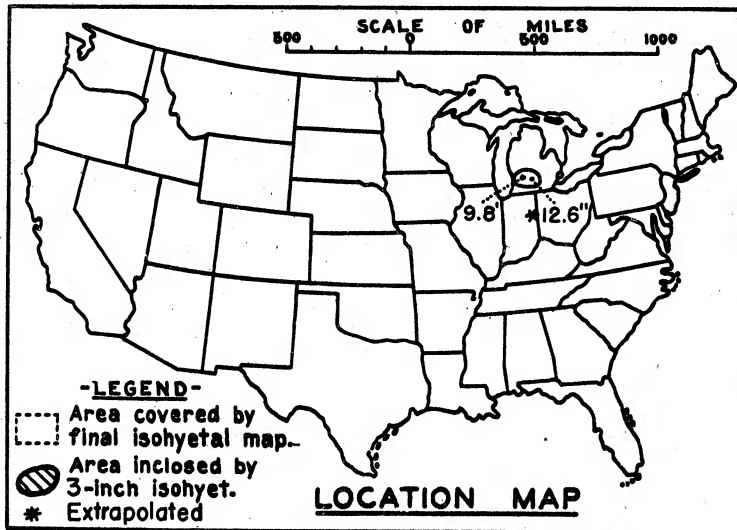
STORM STUDIES - ISOHYETAL MAP

Storm of May 10-12, 1914 Assignment GL 2-15
Study Prepared by: Detroit, Mich. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 31 Aug.-1 Sept. 1914

Assignment GL 2-16

Location Michigan

Study Prepared by:

Great Lakes Division

Milwaukee District Office and

Hydrometeorological Section of

U. S. Weather Bureau.

Part I Reviewed by H. M. Sec. of

Weather Bureau, 10/26/39

Part II Approved by Office, Chief

of Engineers for Distribution

of Factual Data, 10/26/46

Remarks: Centers near

Cooper and Bloomingdale,
Mich.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 8

Form 5001-B (24-hour " ")----- 5

Form 5001-D (" " " ")----- -

Miscl. precip. records, meteorological data, etc.----- 6

Form 5002 (Mass rainfall curves)----- 4

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 2

Form S-11 (Depth-area data from isohyetal map)----- -

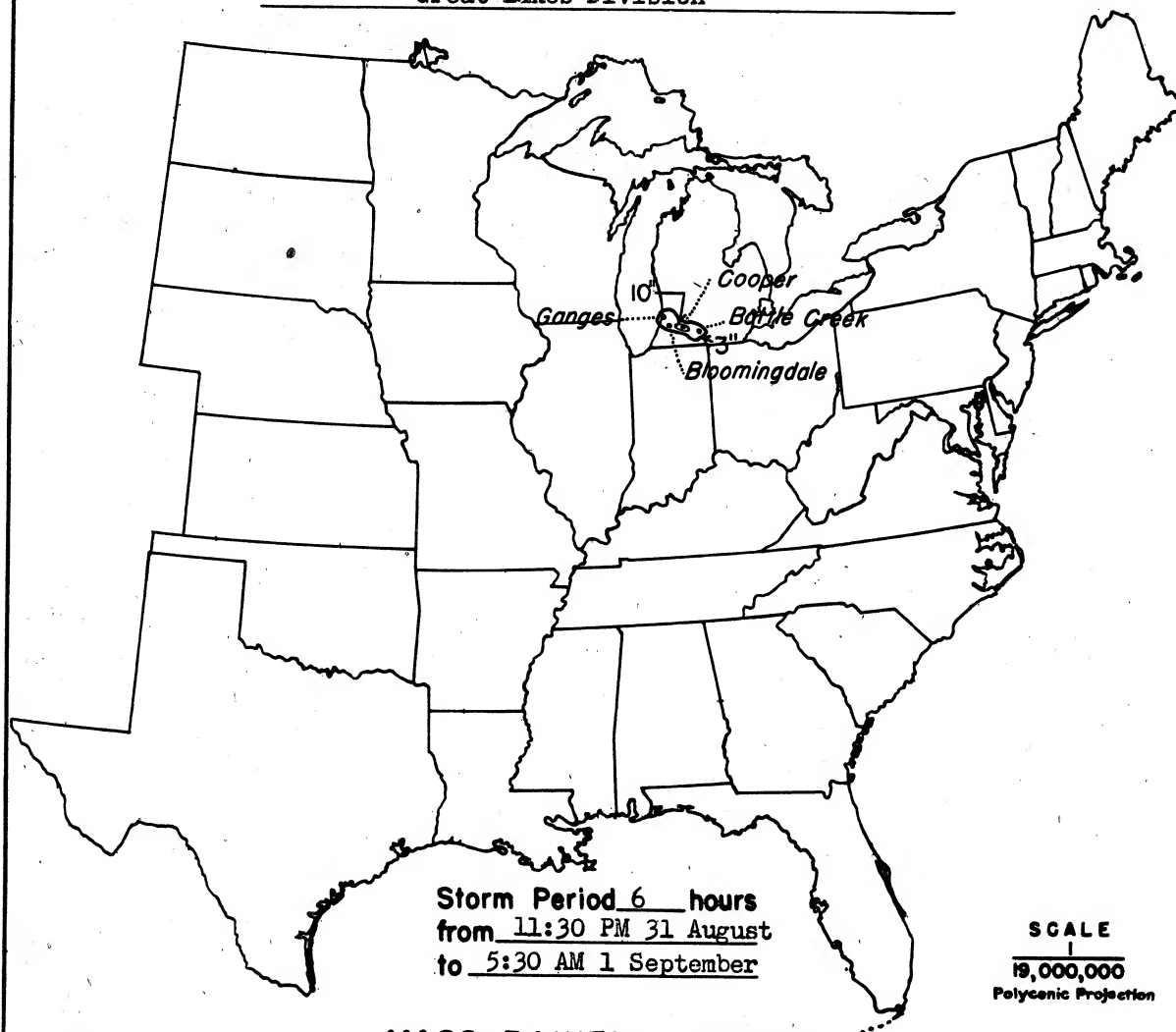
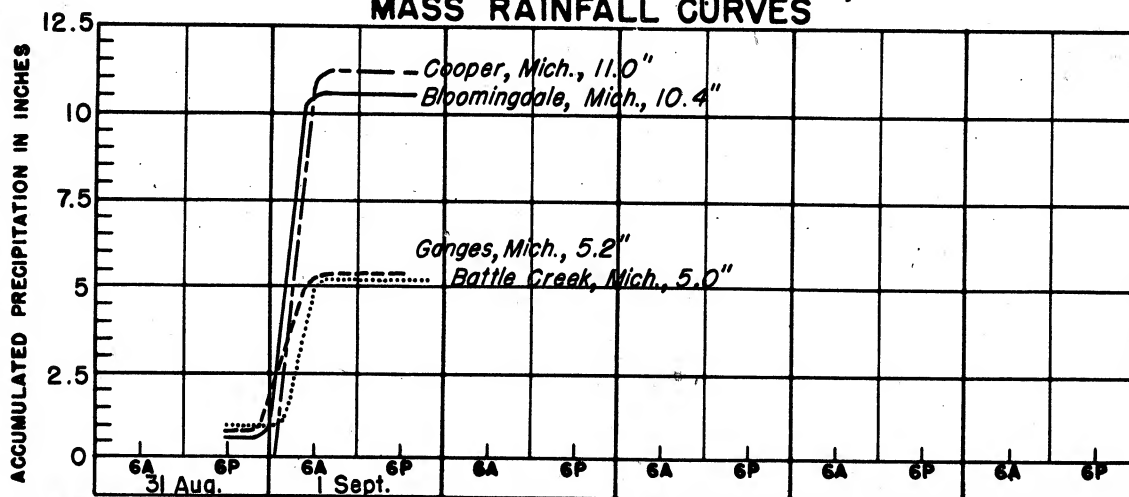
Form S-12 (Maximum depth-duration data)----- -

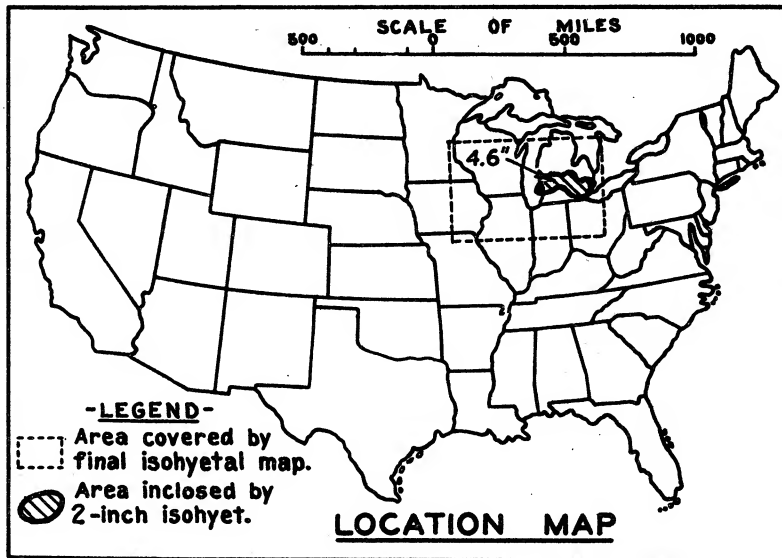
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- -

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6									
10	12.6									
50	12.0									
100	11.3									
200	10.0									
500	7.6									
800	6.3									
1,000	5.7									
1,200	5.2									

STORM STUDIES - ISOHYETAL MAPStorm of Aug. 31-Sept. 1, 1914Assignment GL 2-16Study Prepared by: Milwaukee, Wisc. District
Great Lakes DivisionStorm Period 6 hours
from 11:30 PM 31 August
to 5:30 AM 1 SeptemberSCALE
1
19,000,000
Polycenic Projection**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of March 13-14, 1918
 Assignment GL 2-17
 Location Southern Michigan
 Study Prepared by:
 Great Lakes Division
 Milwaukee District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/7/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/2/44

Remarks: Centers at
 Trowbridge, Charlotte, and
 Ann Arbor, Mich.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " " " ")-----	0
Form 5001-D (" " " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	6
Form 5002 (Mass rainfall curves)-----	10

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

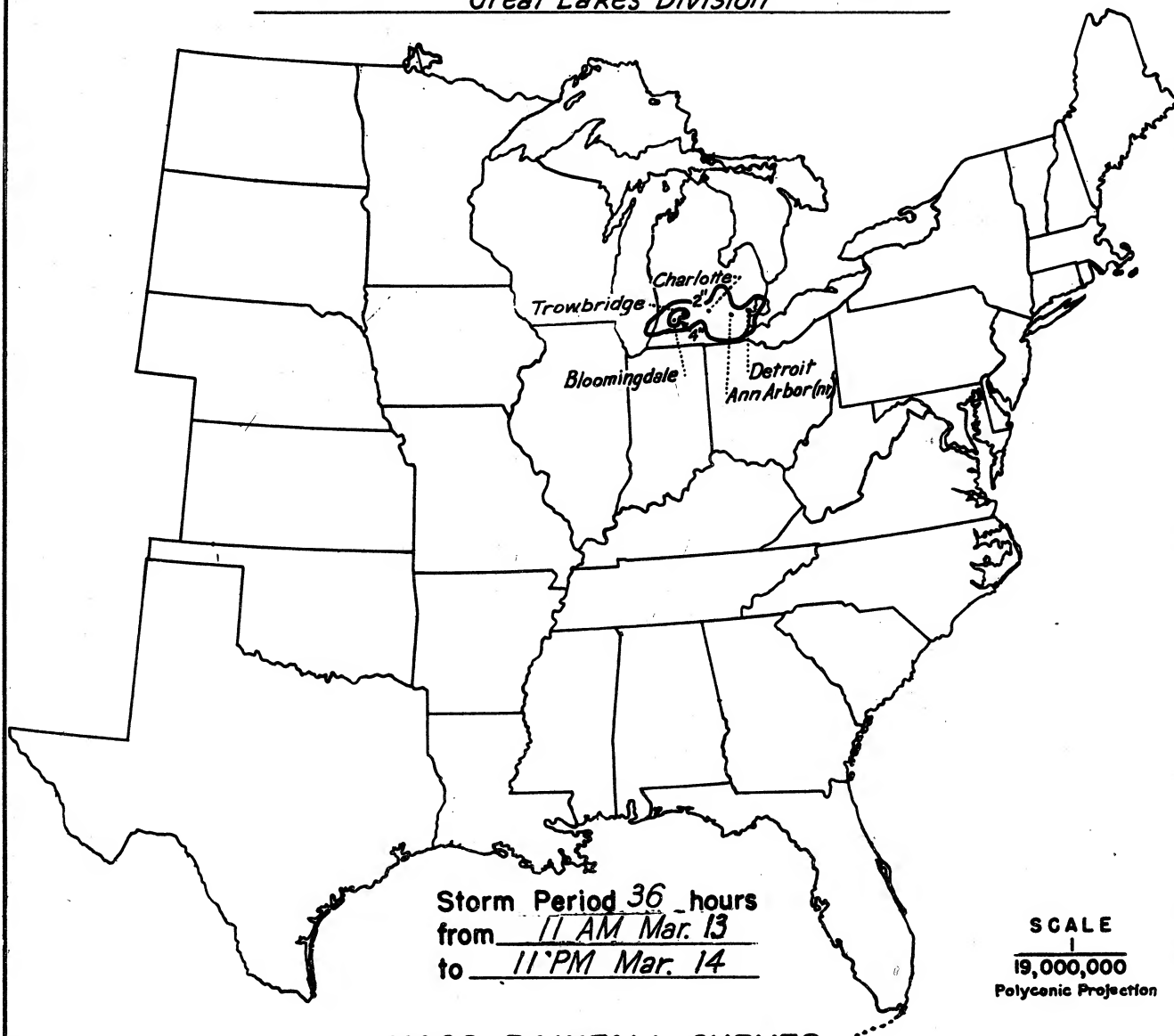
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

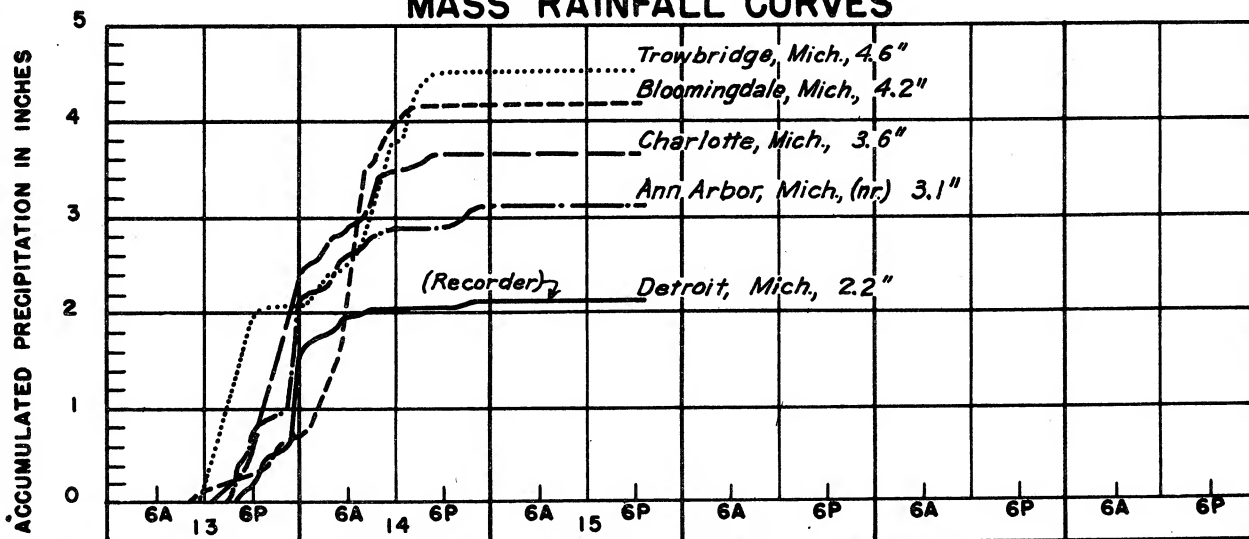
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36				
10	2.5	3.3	3.8	3.9	4.5	4.6				
50	2.1	2.9	3.4	3.8	4.4	4.4				
100	2.0	2.7	3.2	3.6	4.2	4.2				
200	1.8	2.5	3.0	3.4	3.9	3.9				
500	1.6	2.3	2.8	3.2	3.6	3.6				
1000	1.4	2.1	2.6	3.0	3.3	3.3				
2000	1.3	1.9	2.4	2.8	3.1	3.1				
5000	1.0	1.6	2.1	2.5	2.8	2.8				
7500	0.9	1.5	2.0	2.4	2.6	2.6				

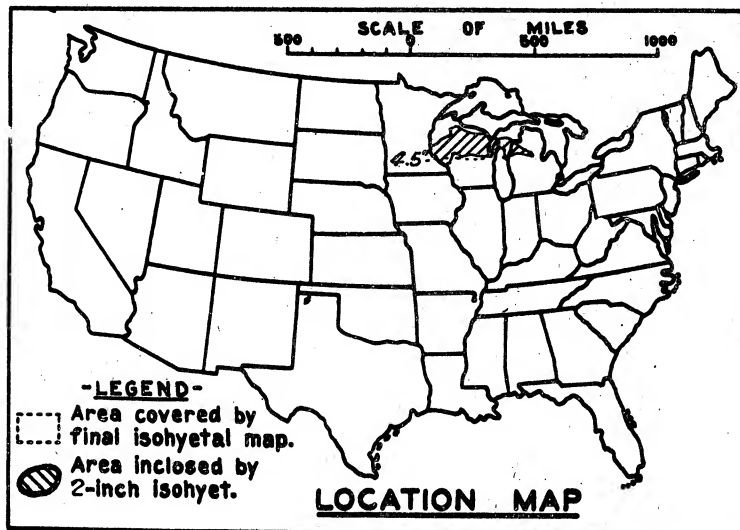
STORM STUDIES - ISOHYETAL MAP

Storm of March 13-14, 1918 Assignment GL 2-17
Study Prepared by: Milwaukee, Wis. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 5-11 April 1919

Assignment G L 2 - 19

Location Wis., - Mich.

Study Prepared by:

Great Lakes Division

Milwaukee District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8-26-44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11-9-45

Remarks: Center at:

Oconto, Wis.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	5
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	1
Misc. precip. records, meteorological data, etc.-----	5
Form 5002 (Mass rainfall curves)-----	3

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

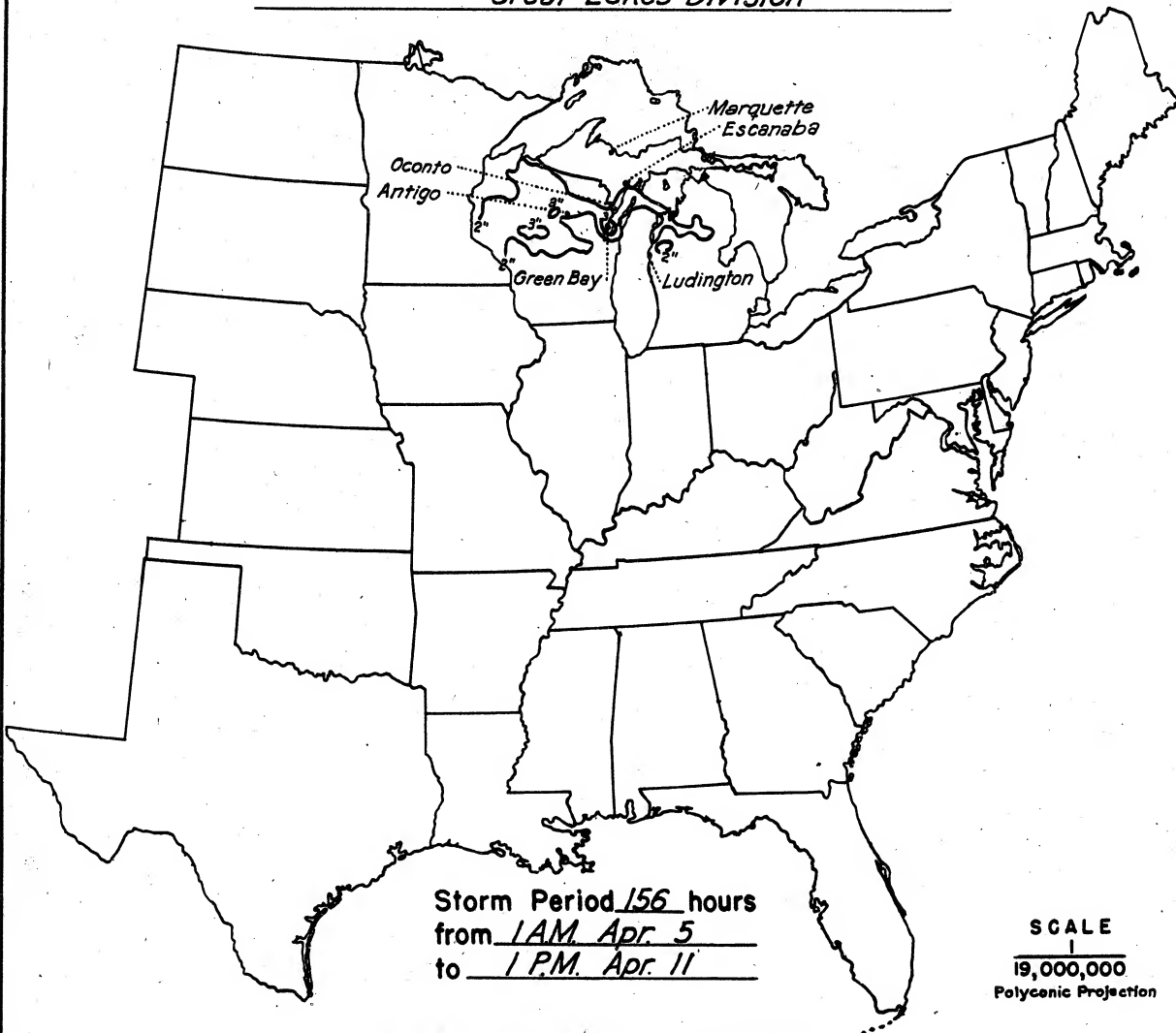
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	1
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

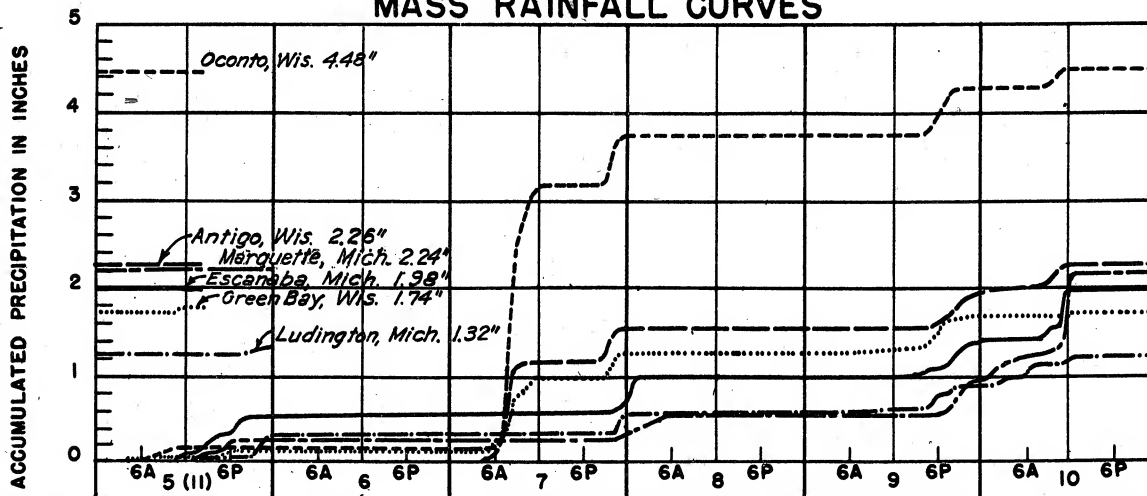
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	156
10	2.9	3.0	3.6	3.6	3.6	3.6	3.6	3.8	4.2	4.4	4.5
50	2.8	2.9	3.5	3.5	3.5	3.5	3.5	3.6	4.0	4.2	4.3
100	2.7	2.8	3.3	3.4	3.4	3.4	3.4	3.5	3.8	4.0	4.1
200	2.5	2.6	3.1	3.2	3.2	3.2	3.2	3.3	3.7	3.9	4.0
500	2.2	2.4	2.8	2.9	2.9	2.9	2.9	3.1	3.4	3.6	3.7
1,000	1.9	2.0	2.4	2.5	2.5	2.5	2.5	2.9	3.2	3.4	3.5
2,000	1.6	1.7	2.1	2.2	2.2	2.2	2.2	2.4	2.8	3.1	3.2
5,000	1.0	1.1	1.5	1.6	1.6	1.6	1.6	1.7	2.1	2.5	2.7

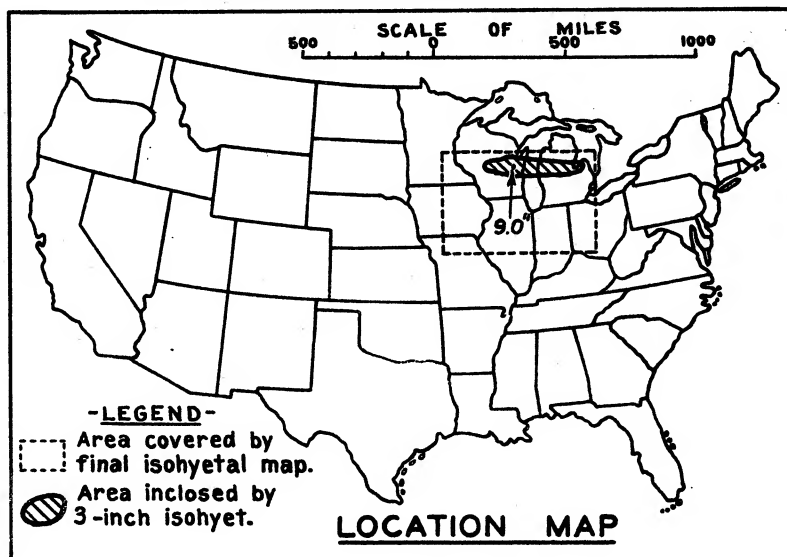
STORM STUDIES - ISOHYETAL MAP

Storm of April 5-11, 1919 Assignment GL 2-19
 Study Prepared by: Milwaukee, Wis. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 8-11, 1922
 Assignment GL 2-21
 Location Wisconsin
 Study Prepared by:
 Great Lakes Division
 Milwaukee District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/31/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/3/44

Remarks: Centers at
 Wrightstown, Wis., and
 Wellston and Omer, Mich.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	15
Form 5001-B (24-hour " ")-----	10
Form 5001-D (" " " ")-----	10
Miscl. precip. records, meteorological data, etc.-----	15
Form 5002 (Mass rainfall curves)-----	25

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

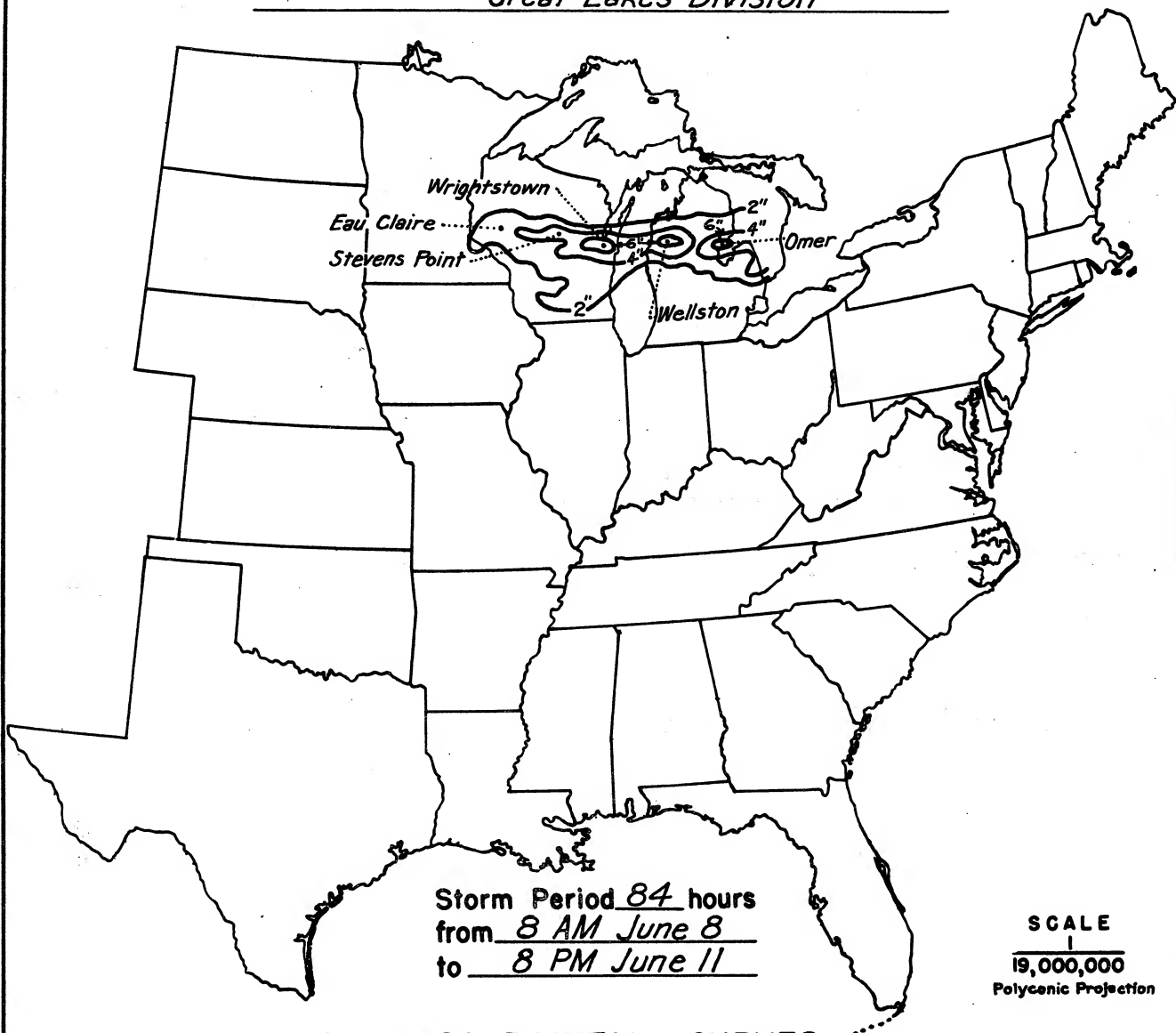
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	-
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

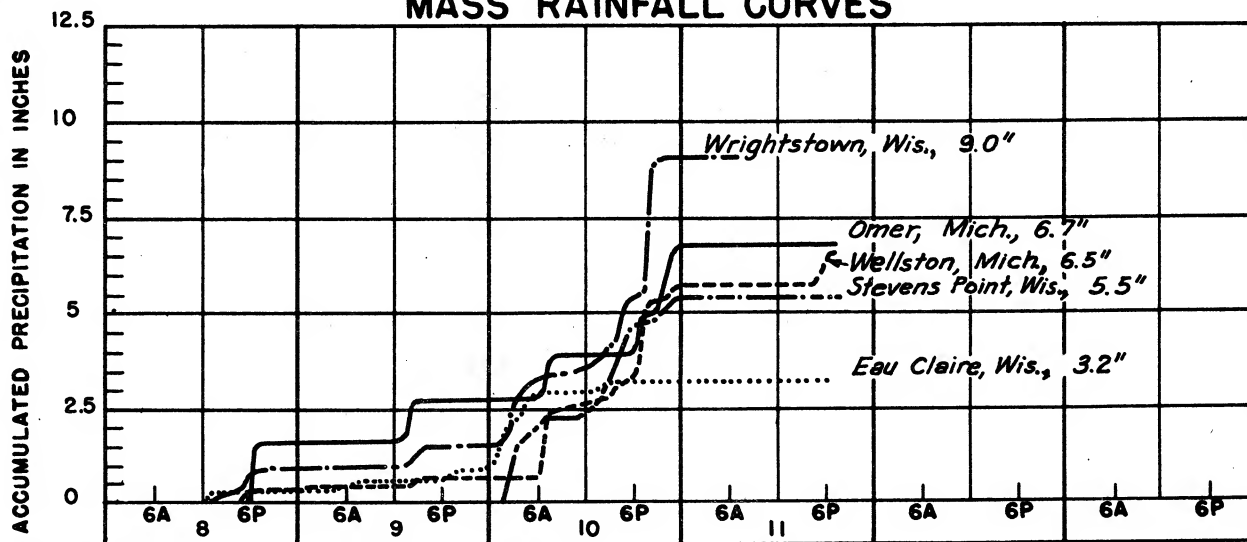
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	6.2	6.2	7.2	7.5	7.7	8.0	8.0	9.0	9.0	9.0
50	5.7	5.8	7.0	7.3	7.5	7.8	7.8	8.8	8.9	8.9
100	5.5	5.6	6.8	7.1	7.3	7.6	7.7	8.6	8.8	8.8
200	5.2	5.4	6.6	6.9	7.2	7.4	7.5	8.5	8.6	8.6
500	4.8	5.1	6.2	6.6	6.7	7.0	7.1	8.1	8.1	8.1
1000	4.4	4.7	5.8	6.1	6.2	6.5	6.6	7.5	7.5	7.5
2000	3.8	4.2	5.2	5.6	5.6	6.0	6.1	6.9	6.9	6.9
5000	2.9	3.5	4.2	4.8	4.9	5.2	5.3	6.0	6.1	6.1
10000	2.3	2.9	3.5	4.2	4.3	4.6	4.7	5.3	5.4	5.4
25000	1.4	2.0	2.5	3.2	3.3	3.7	3.9	4.2	4.3	4.3
45000	0.9	1.3	1.7	2.3	2.5	2.8	3.0	3.3	3.5	3.5

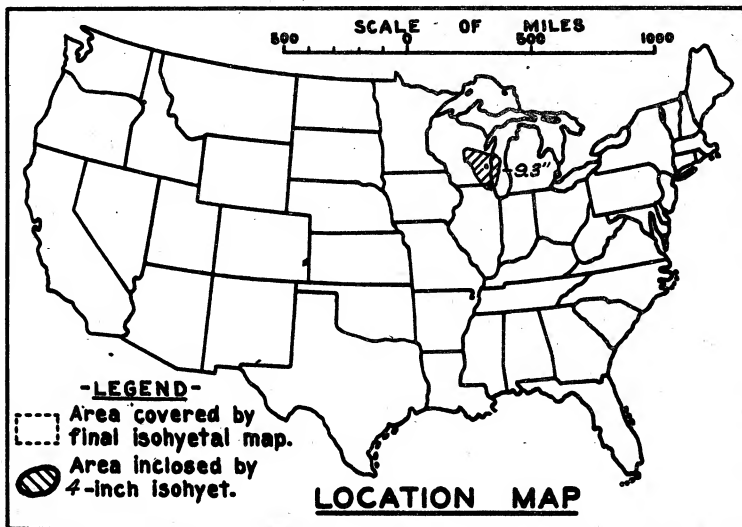
STORM STUDIES - ISOHYETAL MAP

Storm of June 8-11, 1922 Assignment GL 2-21
Study Prepared by: Milwaukee, Wis. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 3-6 August 1924

Assignment G L 2 - 22

Location Wisconsin

Study Prepared by:

Great Lakes Division

Milwaukee District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6-17-43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12-12-45

Remarks: Center at

West Bend, Wisc.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	22
Form 5001-B (24-hour " ")-----	—
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	29
Form 5002 (Mass rainfall curves)-----	18

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

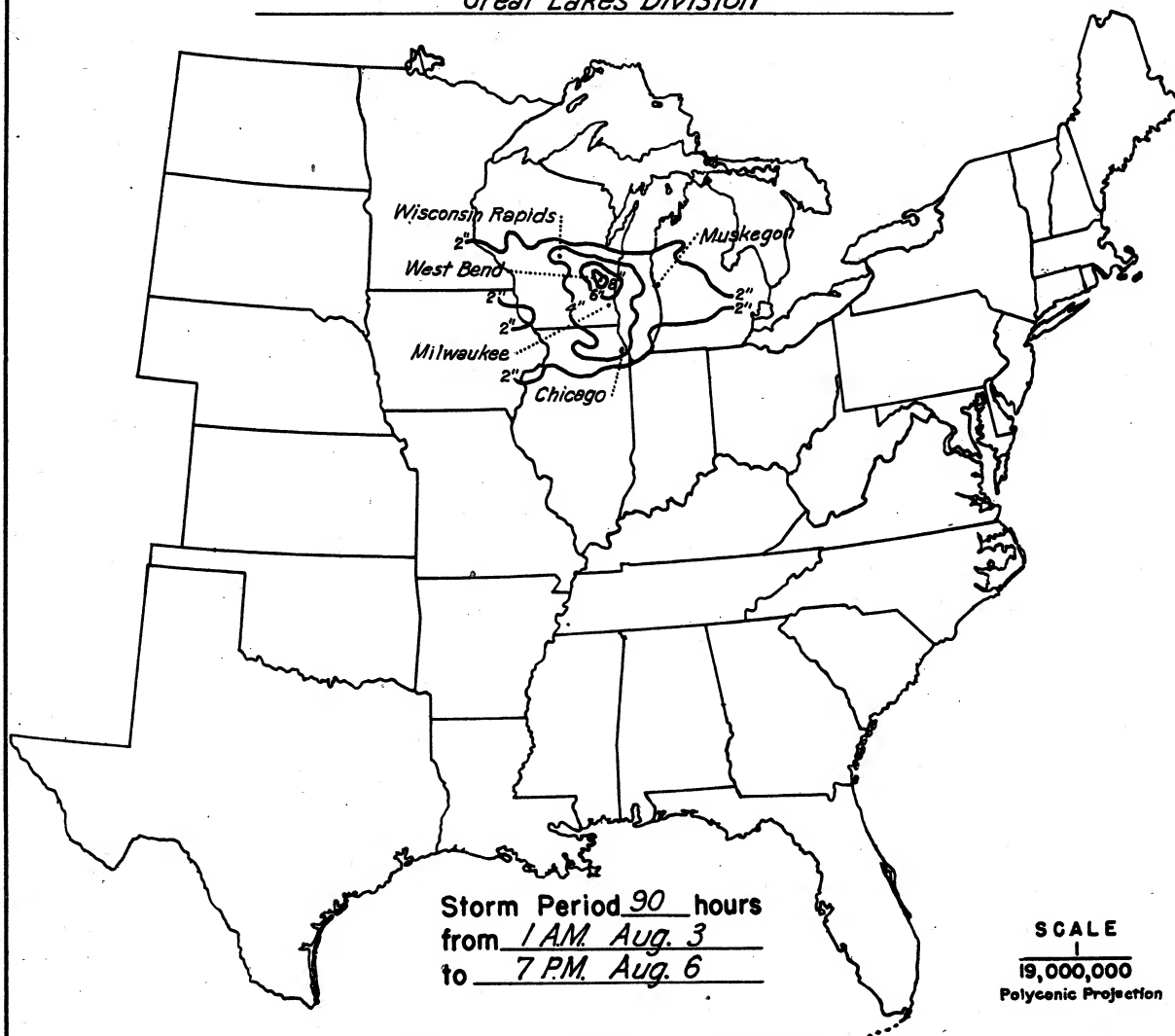
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

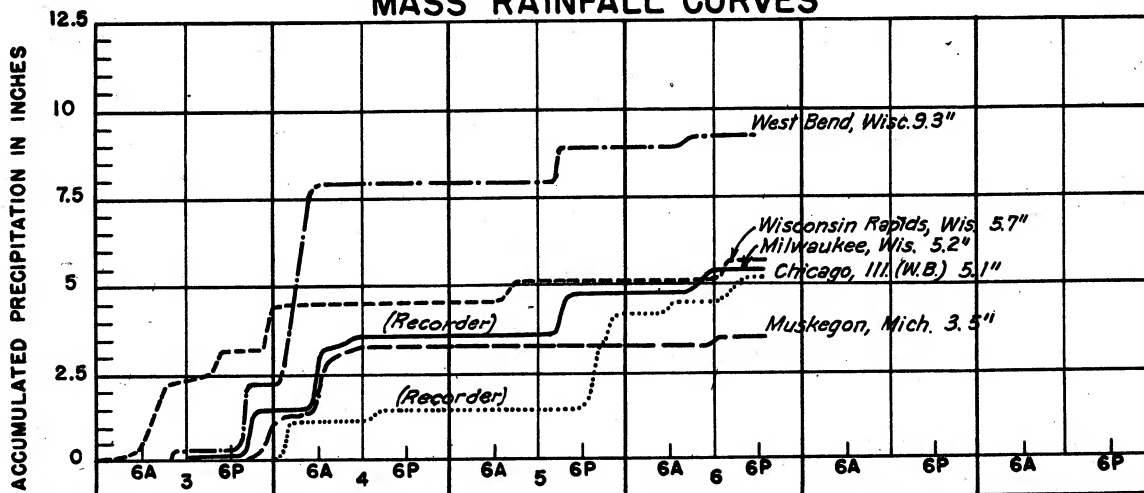
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	90
10	5.8	7.7	7.7	7.9	7.9	7.9	8.8	9.0	9.2	9.3
100	5.6	7.3	7.3	7.7	7.7	7.7	8.5	8.8	9.0	9.1
200	5.4	7.0	7.1	7.5	7.5	7.5	8.2	8.7	8.8	8.9
500	5.1	6.4	6.6	7.2	7.2	7.2	7.6	8.3	8.3	8.5
1,000	4.7	5.9	6.1	6.7	6.8	6.8	7.0	7.8	7.8	8.1
2,000	4.1	5.3	5.5	6.2	6.3	6.3	6.4	7.3	7.3	7.5
5,000	3.1	4.3	4.5	5.1	5.3	5.3	5.4	6.1	6.3	6.6
10,000	2.2	3.3	3.6	4.0	4.3	4.4	4.5	5.2	5.6	5.9
20,000	1.6	2.3	2.7	3.0	3.3	3.4	3.6	4.2	4.7	5.1
50,000	1.0	1.5	1.7	2.2	2.4	2.6	2.6	3.0	3.5	3.9

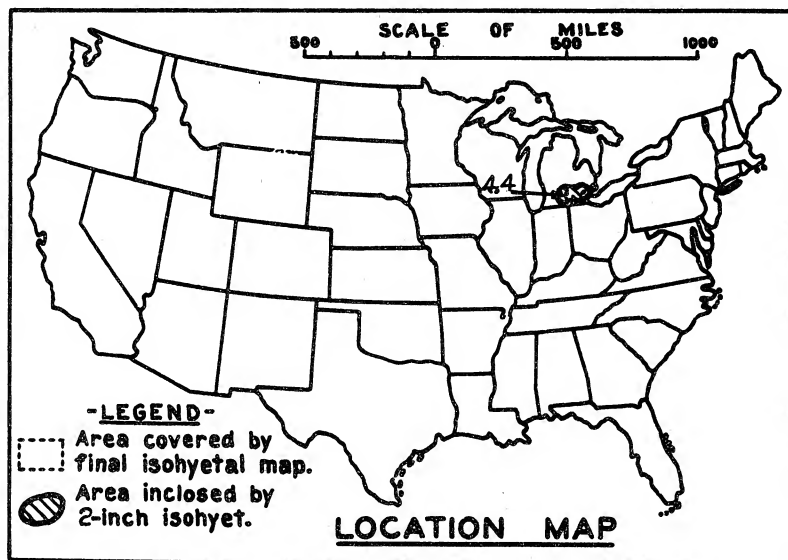
STORM STUDIES - ISOHYETAL MAP

Storm of August 3-6, 1924 Assignment GL 2-22
Study Prepared by: Milwaukee, Wis. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of February 9-14, 1938

Assignment GL 2 - 27

Location Central Michigan

Study Prepared by:

Great Lakes Division

Detroit District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/22/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/26/43Remarks: Centers at
Lansing, Mich., and
Pontiac, Mich.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 4

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 2

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 6

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,250,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 2

Form S-11 (Depth-area data from isohyetal map)----- 1

Form S-12 (Maximum depth-duration data)----- 2

Maximum duration-depth-area curves----- 1

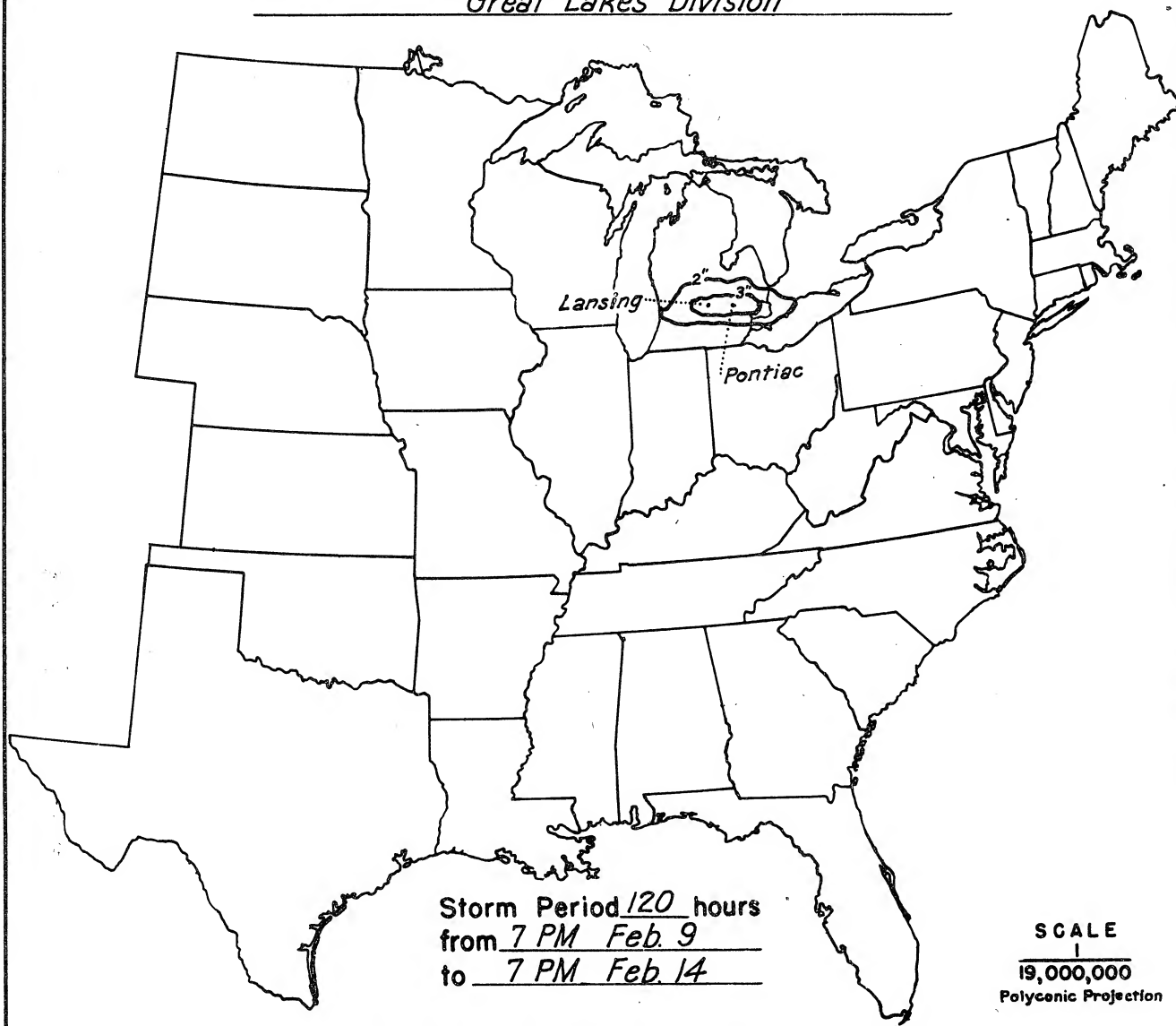
Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

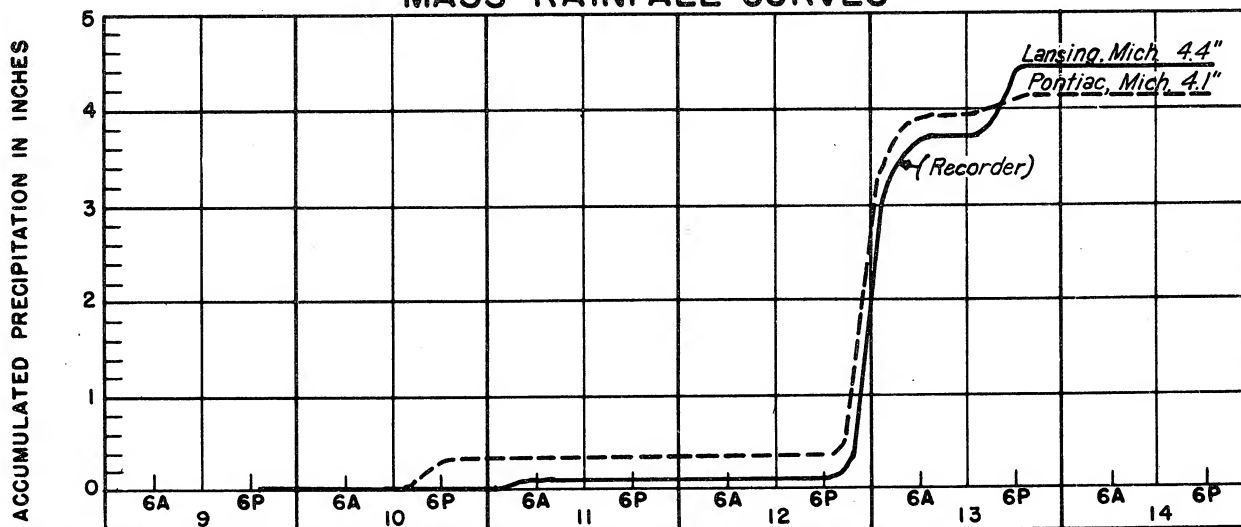
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	3.1	3.5	3.6	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.4
100	3.1	3.5	3.6	4.2	4.2	4.2	4.2	4.3	4.3	4.4	4.4
200	3.0	3.4	3.5	4.1	4.1	4.1	4.1	4.1	4.3	4.3	4.3
500	2.8	3.3	3.3	3.8	3.8	3.8	3.9	4.0	4.0	4.1	4.1
1,000	2.5	3.2	3.2	3.6	3.6	3.6	3.7	3.8	3.8	3.9	3.9
2,000	2.3	3.1	3.1	3.4	3.4	3.4	3.5	3.6	3.6	3.6	3.6
2,500	2.3	3.1	3.1	3.4	3.4	3.4	3.4	3.5	3.5	3.6	3.6

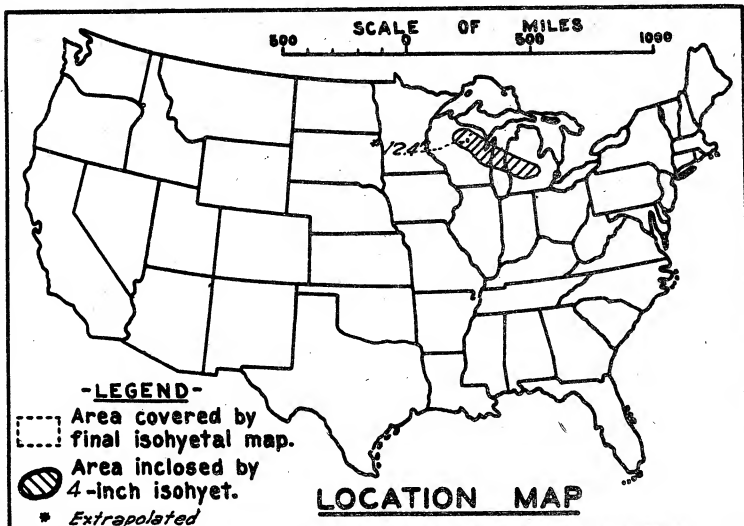
STORM STUDIES - ISOHYETAL MAP

Storm of February 9-14, 1938 Assignment GL 2:27
Study Prepared by: Detroit, Mich. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 19-24 July 1912

Assignment G L 2 - 29

Location Wisc., Mich.

Study Prepared by:

Great Lakes Division

Milwaukee District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/27/39Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/18/46

Remarks: Center near

Merrill, Wisconsin

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	15
Form 5001-B (24-hour " " " ").....	4
Form 5001-D (" " " " " ").....	8
Misc. precip. records, meteorological data, etc.....	20
Form 5002 (Mass rainfall curves).....	28

PART II

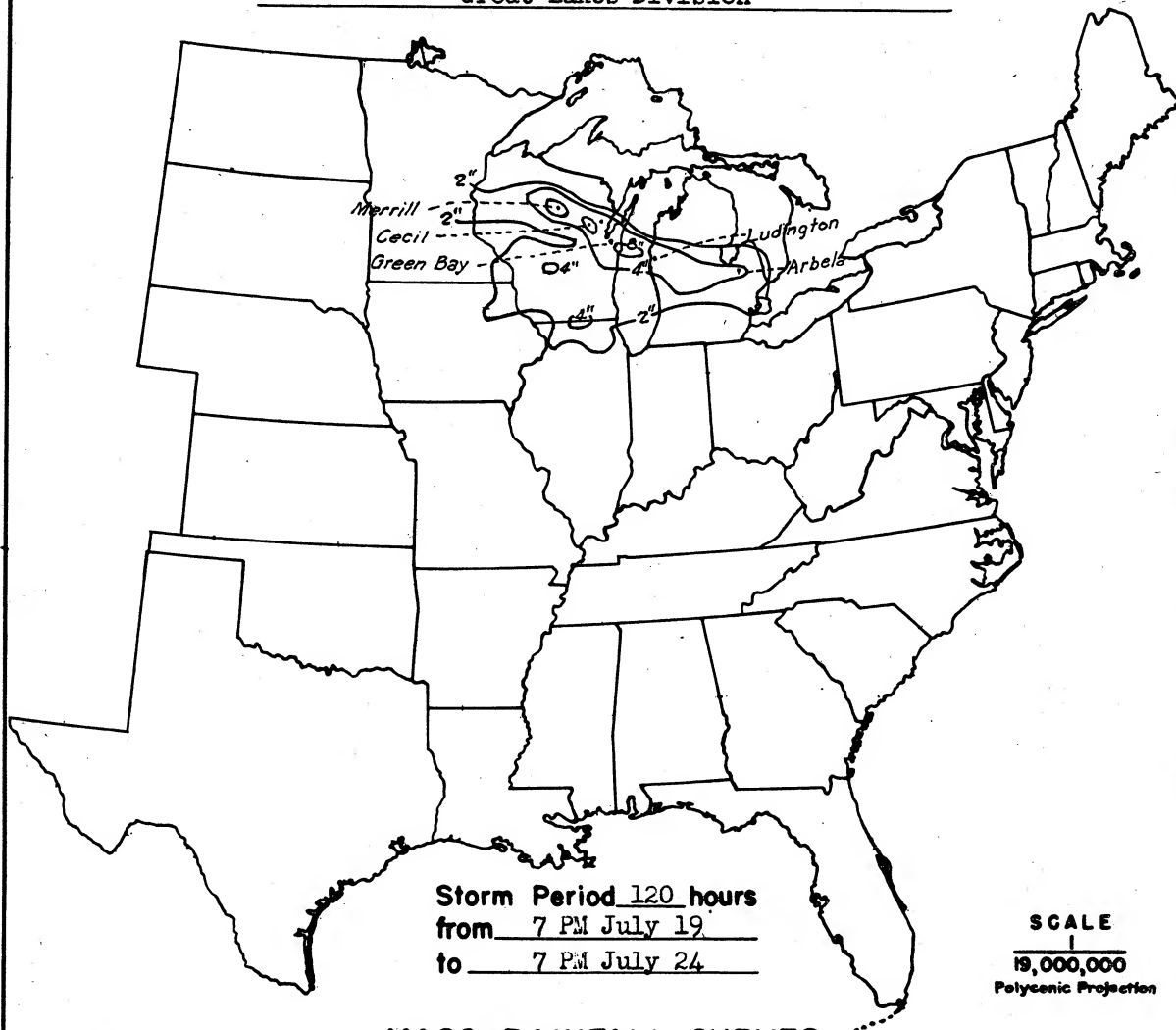
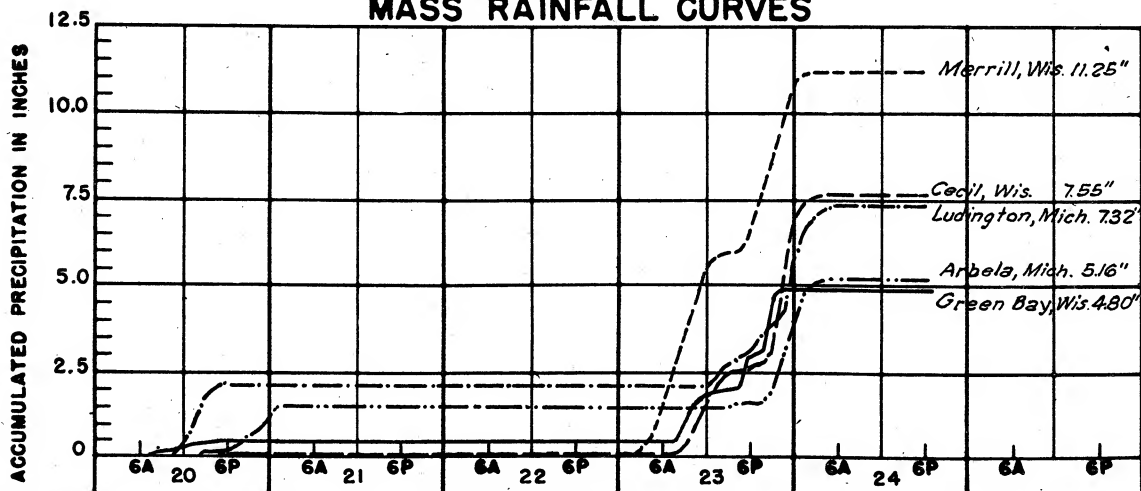
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

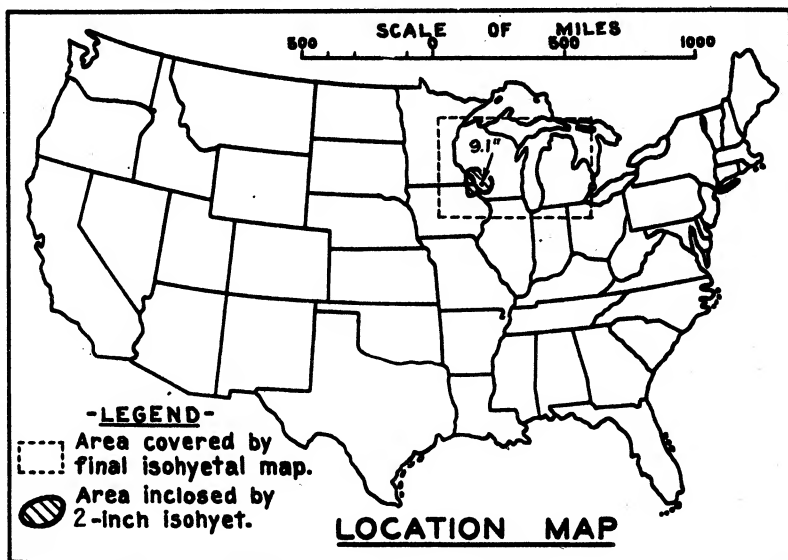
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	6
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	8
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	5.5	6.5	10.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
100	5.4	6.4	9.9	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
200	5.2	6.3	9.5	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
500	4.7	6.2	8.6	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
1,000	4.1	6.0	7.8	9.2	9.3	9.3	9.3	9.3	9.3	9.4	9.4
2,000	3.6	5.3	7.0	8.1	8.3	8.3	8.3	8.3	8.3	8.5	8.5
5,000	2.9	4.2	5.8	6.6	6.8	6.8	6.8	6.8	6.8	7.4	7.4
10,000	2.4	3.4	4.7	5.4	5.6	5.6	5.6	5.6	5.6	6.5	6.5
20,000	1.8	2.5	3.6	4.1	4.4	4.4	4.4	4.4	4.4	5.7	5.7
50,000	1.0	1.4	2.2	2.5	2.7	2.7	2.7	2.7	2.7	4.0	4.3
58,000	0.9	1.2	1.9	2.2	2.4	2.4	2.4	2.4	2.4	3.6	3.9

STORM STUDIES - ISOHYETAL MAPStorm of July 19-24, 1912Assignment GL 2-29Study Prepared by: Milwaukee, Wis. DistrictGreat Lakes Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 21-23, 1917
 Assignment G.L. 2-30
 Location Wis., Iowa, Minn.
 Study Prepared by:
 Great Lakes Division
 Milwaukee District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/27/39
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/20/42

Remarks: Center at
 Viroqua, Wis.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	4
Form 5001-B (24-hour " ")	-----	-
Form 5001-D (" " " ")	-----	2
Misc. precip. records, meteorological data, etc. Newspaper accounts	-----	8
Form 5002 (Mass rainfall curves)	-----	5

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

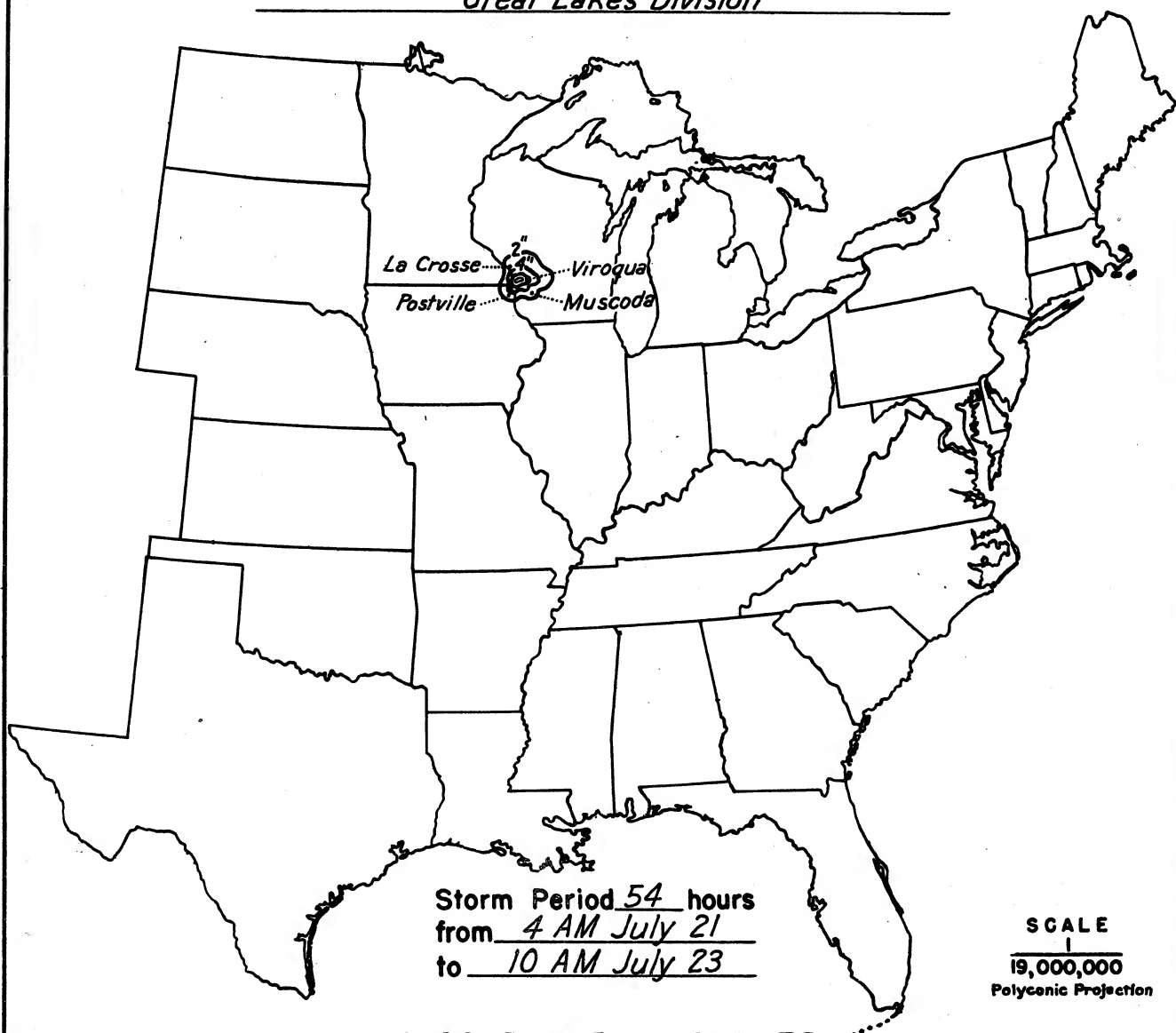
Form S-10 (Data from mass rainfall curves)	-----	1
Form S-11 (Depth-area data from isohyetal map)	-----	1
Form S-12 (Maximum depth-duration data)	-----	2
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

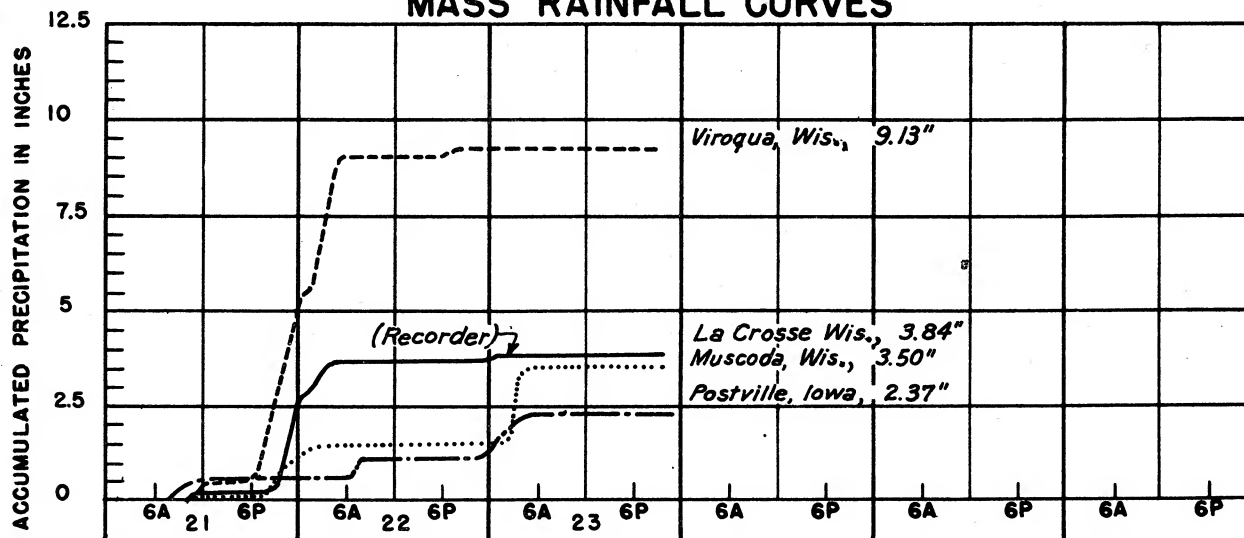
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	54	
10	5.2	8.5	8.7	8.9	9.0	9.0	9.1	9.1	
50	5.0	8.2	8.4	8.6	8.7	8.7	8.8	8.8	
100	4.9	8.0	8.2	8.4	8.5	8.5	8.6	8.6	
200	4.7	7.7	8.0	8.2	8.3	8.3	8.4	8.4	
500	4.1	6.6	7.2	7.4	7.5	7.5	7.7	7.7	
1000	3.6	5.6	6.3	6.6	6.6	6.7	6.9	6.9	
2000	3.0	4.6	5.0	5.2	5.3	5.8	6.0	6.0	
5000	2.3	3.0	3.3	3.4	3.5	4.1	4.2	4.2	

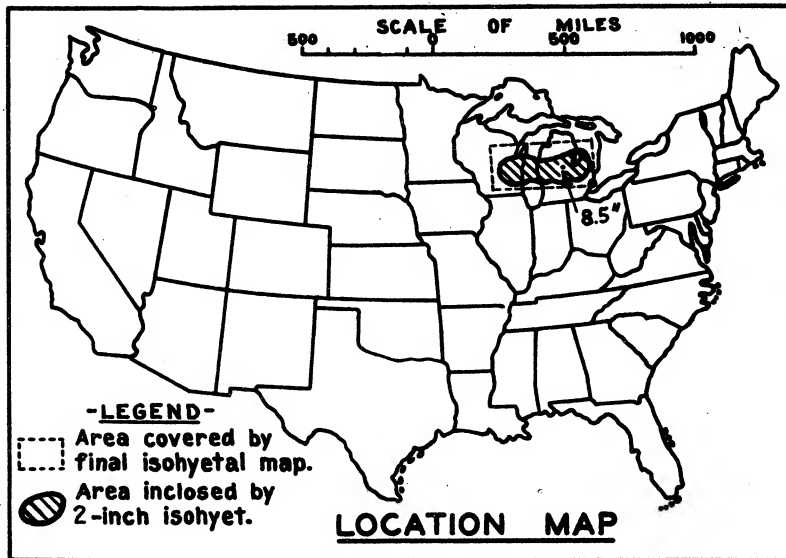
STORM STUDIES - ISOHYETAL MAP

Storm of July 21-23, 1917 Assignment GL 2-30
Study Prepared by: Milwaukee, Wis. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 19-22, 1912

Assignment G.L. 3-1

Location Michigan - Wisconsin

Study Prepared by:

Great Lakes Division
Detroit District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 5/3/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/27/44

Remarks: Centers at

Gladwin, Mich., East Tawas
Mich., and Oshkosh, Wis.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " ")-----	11
Form 5001-D (" " " ")-----	-
Miscl. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	11

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

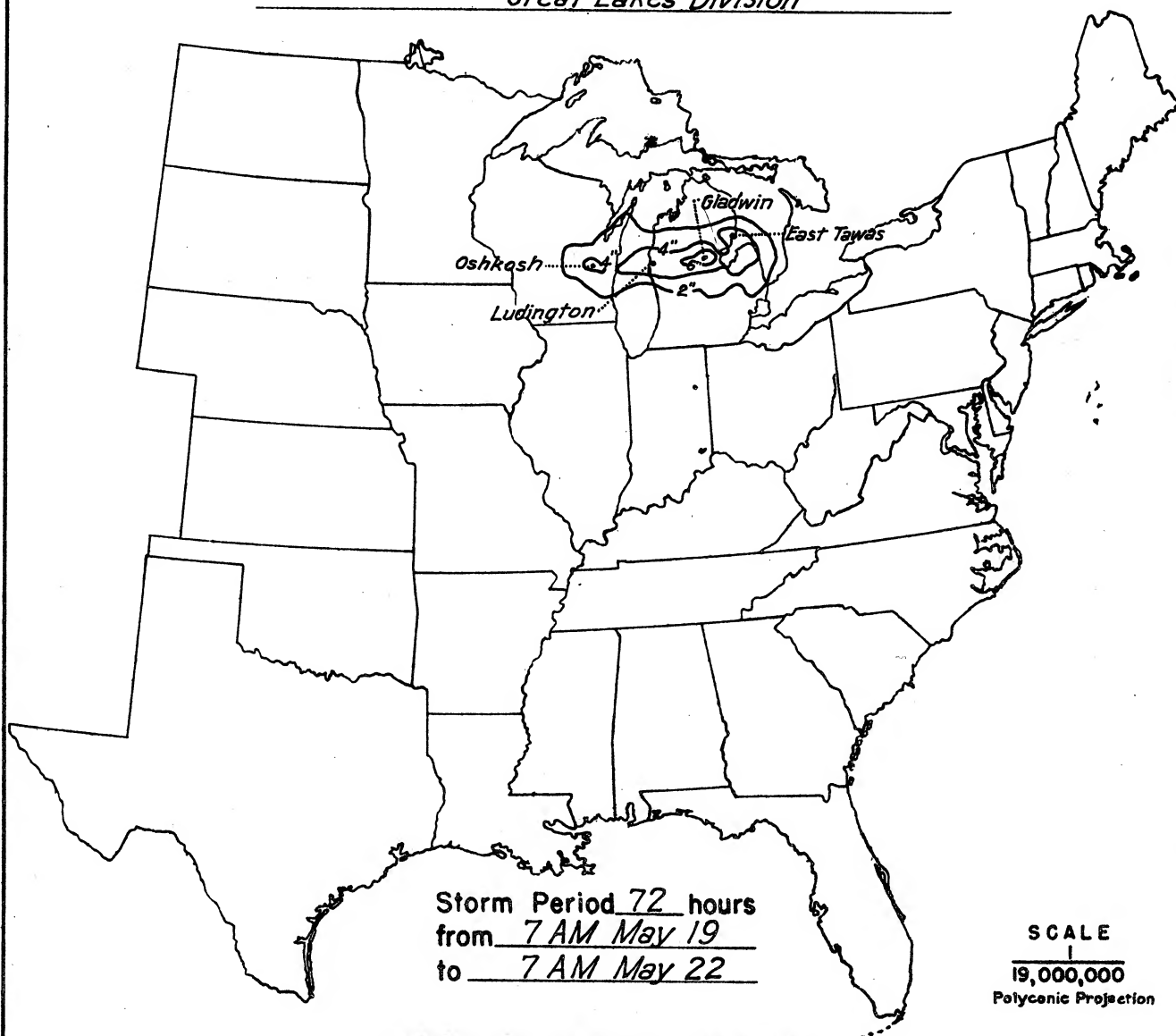
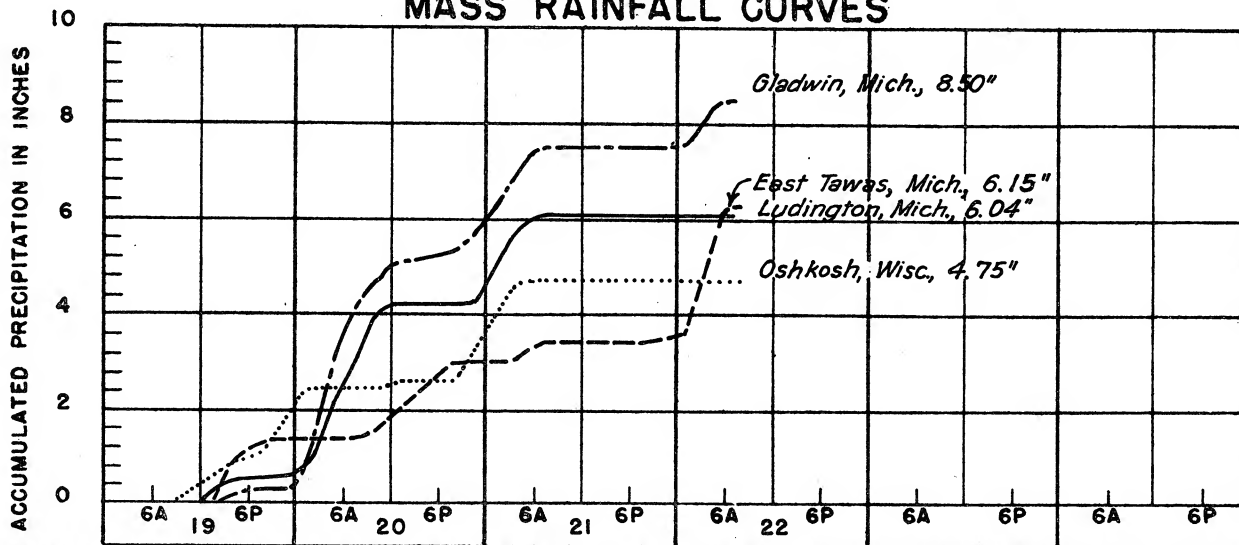
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

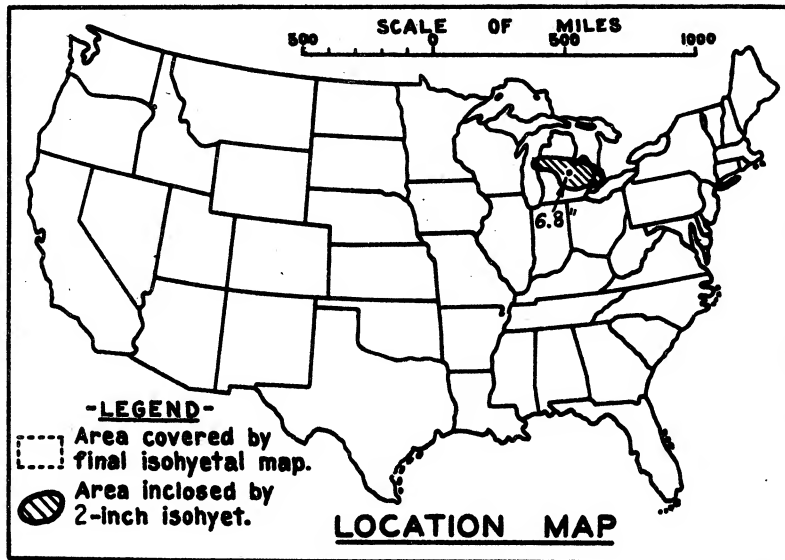
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	4.1	4.7	4.9	6.0	7.0	7.1	7.3	8.3	8.5	
100	3.7	4.3	4.5	5.5	6.5	6.6	6.9	7.7	7.9	
200	3.4	4.2	4.3	5.3	6.3	6.4	6.7	7.5	7.7	
500	3.0	3.9	4.1	4.9	5.9	6.1	6.4	7.0	7.3	
1000	2.7	3.6	3.7	4.6	5.5	5.6	6.1	6.5	6.8	
2000	2.3	3.2	3.4	4.2	5.1	5.2	5.7	6.0	6.3	
5000	1.7	2.5	2.8	3.5	4.5	4.6	5.1	5.3	5.7	
10000	1.3	2.0	2.3	3.0	4.0	4.1	4.5	4.7	5.1	
20000	0.9	1.5	1.8	2.4	3.1	3.3	3.8	3.9	4.4	
37156	0.5	1.0	1.4	1.6	2.1	2.6	3.0	3.1	3.6	

STORM STUDIES - ISOHYETAL MAP

Storm of May 19-22, 1912 Assignment GL 3-1
Study Prepared by: Detroit, Mich. District
Great Lakes Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of August 8-10, 1913

Assignment GL 3 - 2

Location Michigan

Study Prepared by:

Great Lakes Division
Detroit District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 6/22/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/27/44Remarks: Center at
Bay City, Michigan**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	7

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000.

Data and computation sheets:

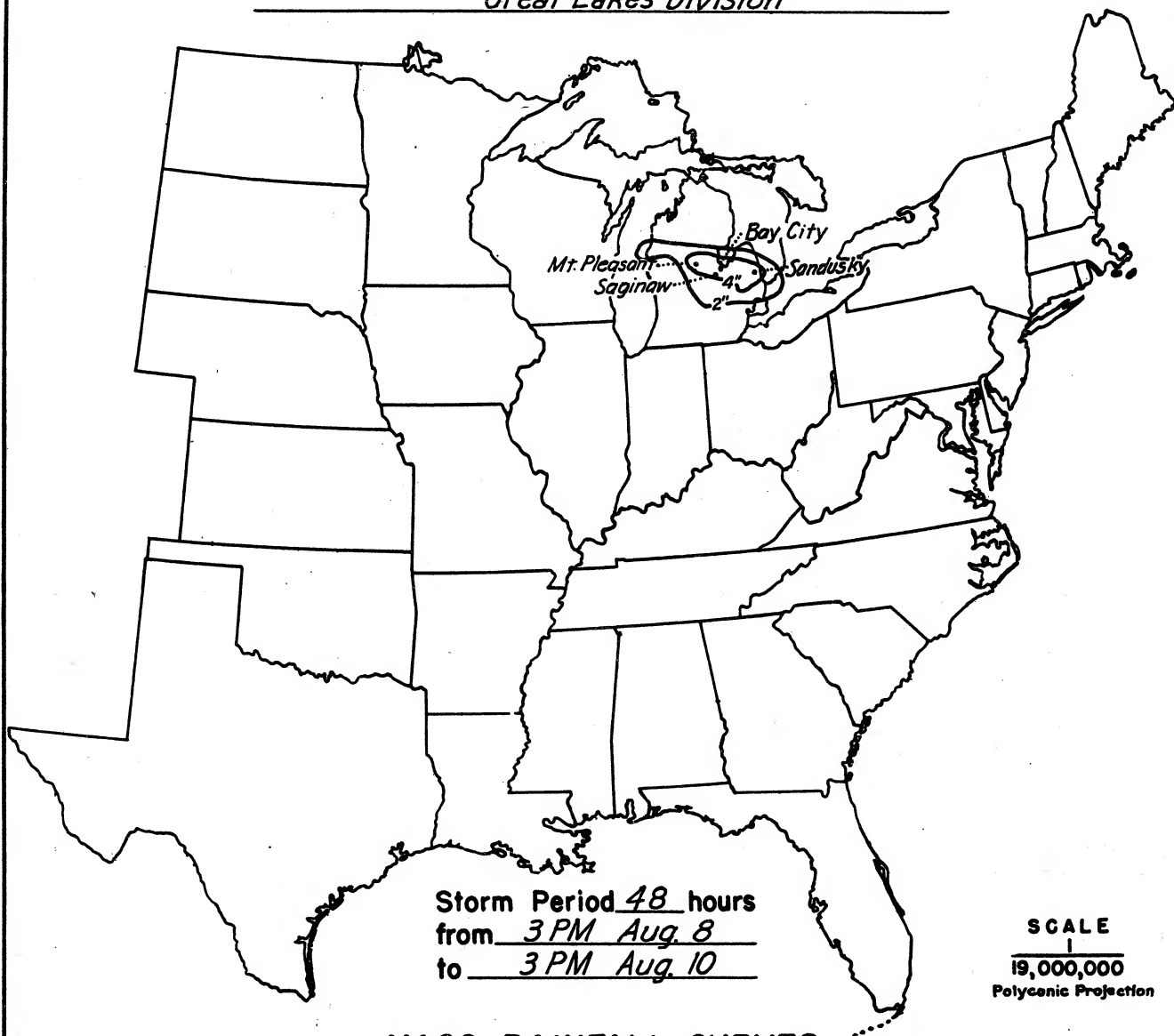
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

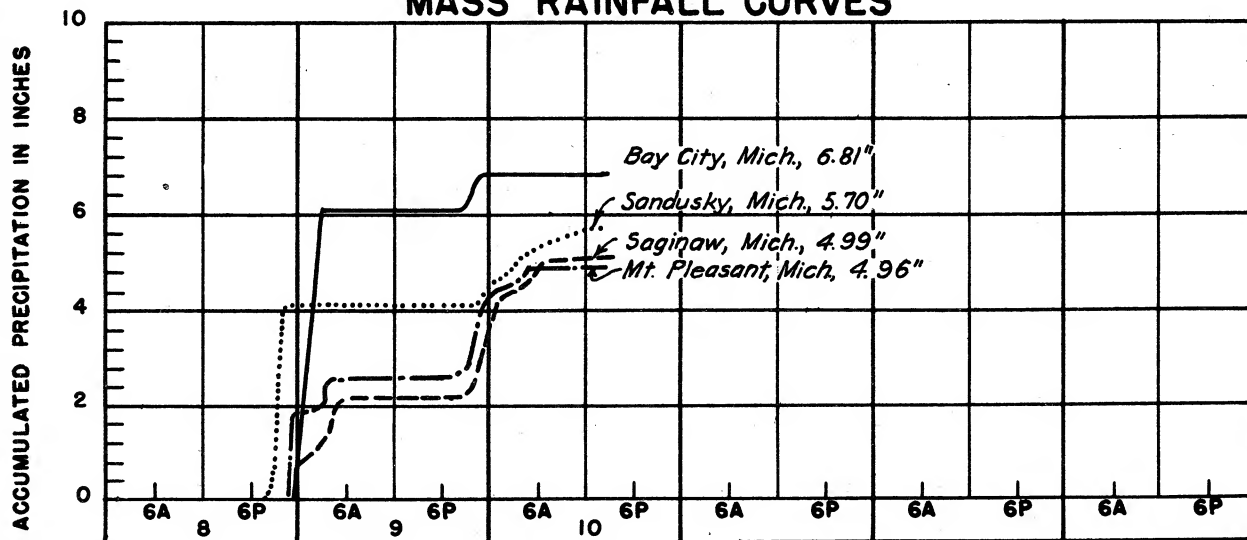
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	6.0	6.0	6.0	6.8	6.8	6.8	6.8					
100	5.3	5.8	5.8	6.1	6.6	6.7	6.7					
200	5.0	5.6	5.6	5.7	6.4	6.6	6.6					
500	4.5	5.2	5.2	5.2	6.1	6.3	6.3					
1,000	4.0	4.6	4.7	4.7	5.7	6.0	6.1					
2,000	3.4	4.1	4.1	4.2	5.2	5.6	5.7					
5,000	2.6	3.2	3.3	3.4	4.3	4.8	4.9					
10,000	1.9	2.5	2.6	2.7	3.5	3.9	4.1					
16,000	1.4	2.0	2.2	2.3	2.9	3.2	3.5					

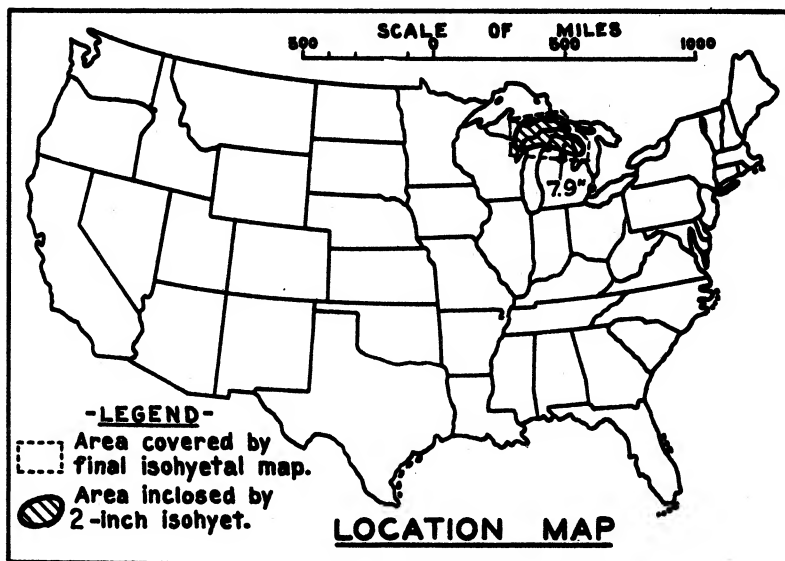
STORM STUDIES - ISOHYETAL MAP

Storm of August 8-10, 1913 Assignment GL 3-2
Study Prepared by: Detroit, Mich. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Aug. 31-Sept. 3, 1937

Assignment G.L. 3-5

Location E. & N. Michigan

Study Prepared by:

Detroit District Office
Great Lakes DivisionPart I Reviewed by H. M. Sec. of
Weather Bureau, 6/22/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/27/44Remarks: Centers at
Wolverine, Mich., and
Escanaba, Mich**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	4
Form 5001-B (24-hour " ").....	0
Form 5001-D (" " " ").....	3
Misc. precip. records, meteorological data, etc.....	0
Form 5002 (Mass rainfall curves).....	7

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

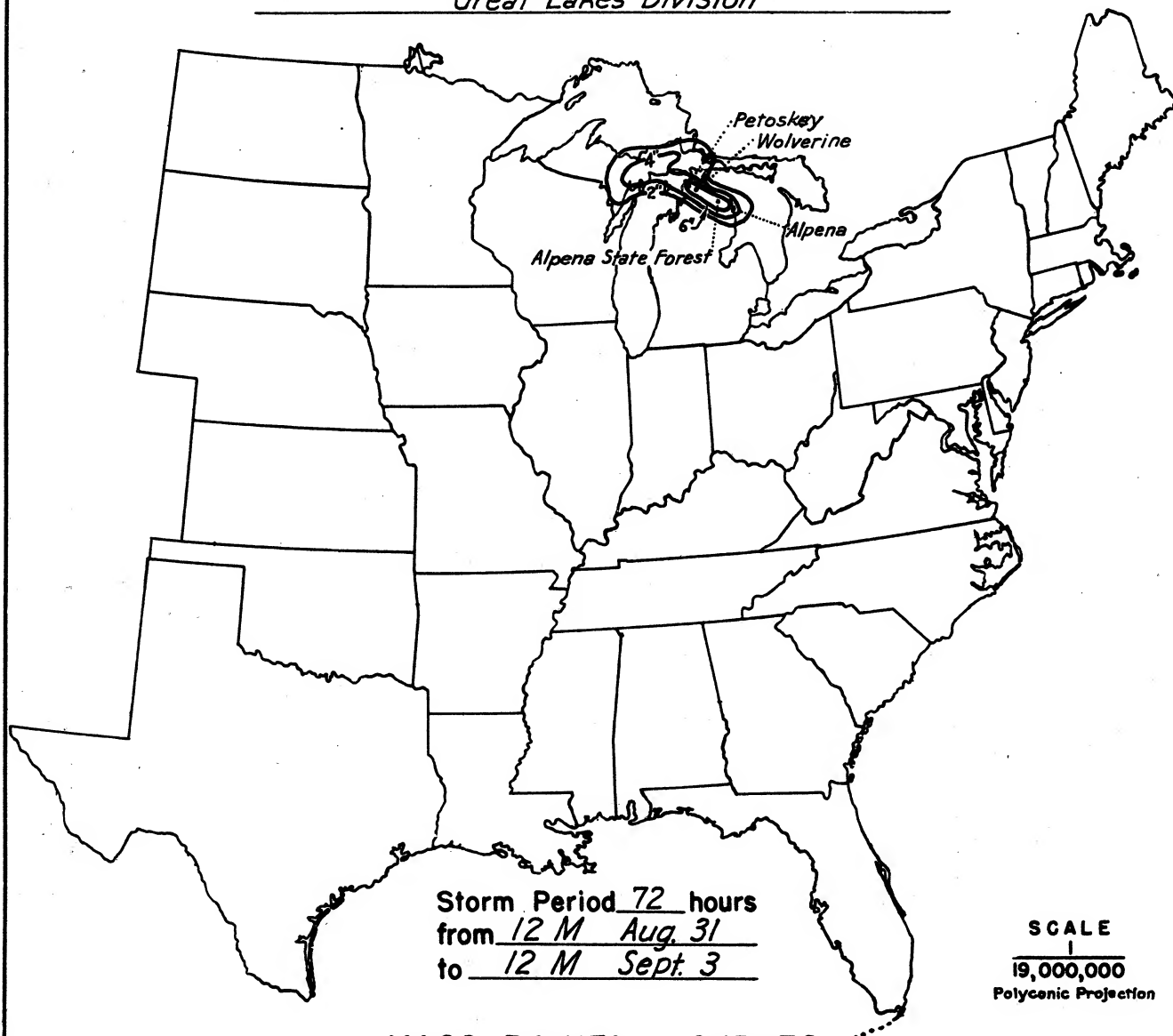
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	4
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

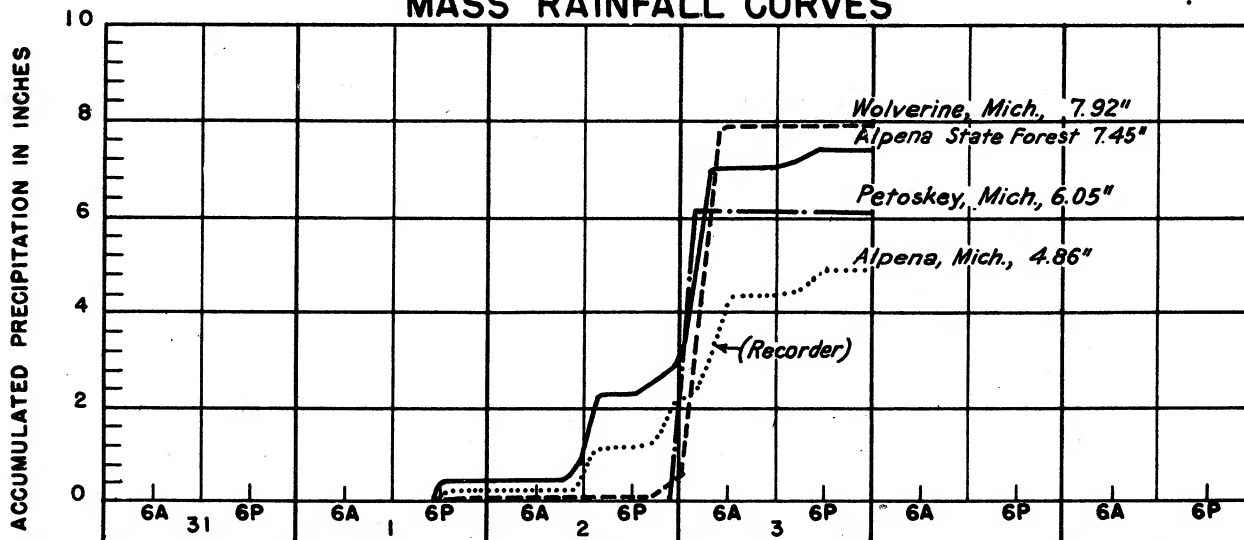
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

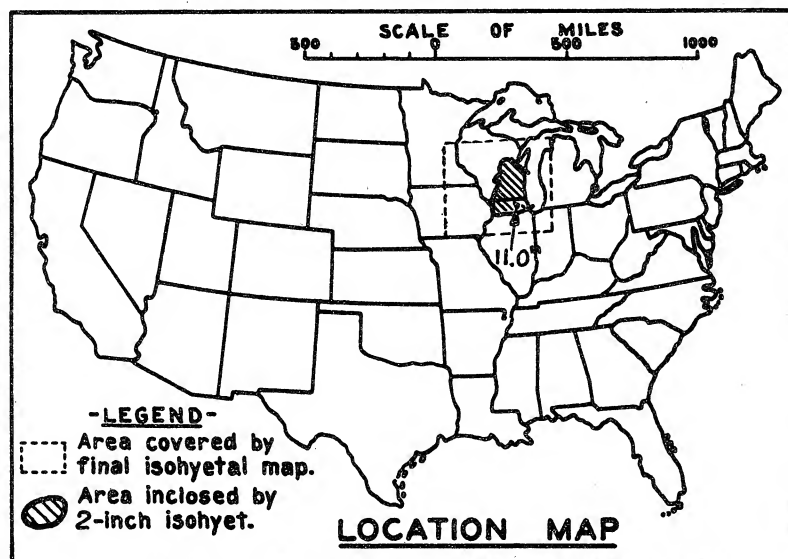
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	
100	6.7	7.1	7.4	7.7	7.7	7.7	7.8	7.8	7.8	
200	6.3	6.8	7.2	7.6	7.6	7.6	7.7	7.7	7.7	
500	5.7	6.4	6.9	7.3	7.3	7.3	7.4	7.4	7.4	
1000	5.3	5.9	6.4	7.0	7.0	7.0	7.1	7.1	7.1	
2000	4.7	5.3	5.8	6.2	6.3	6.3	6.5	6.5	6.6	
5000	3.7	4.1	4.5	4.8	4.9	5.0	5.5	5.6	5.7	
10000	2.6	3.0	3.4	3.6	3.7	4.0	4.5	4.7	4.8	
19000	1.5	1.9	2.2	2.5	2.6	2.8	3.2	3.6	3.8	

STORM STUDIES - ISOHYETAL MAP

Storm of August 31 - September 3, 1937 Assignment GL 3-5Study Prepared by: Detroit, Mich. District
Great Lakes Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 29-July 1, 1938

Assignment GL 3 - 11

Location Illinois - Wisconsin

Study Prepared by:

Great Lakes Division
Chicago District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 1/9/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/30/43

Remarks: Centers at

Libertyville, Ill., and
Coddington, Wis.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	7
Miscl. precip. records, meteorological data, etc.-----	2
Form 5002 (Mass rainfall curves)-----	21

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

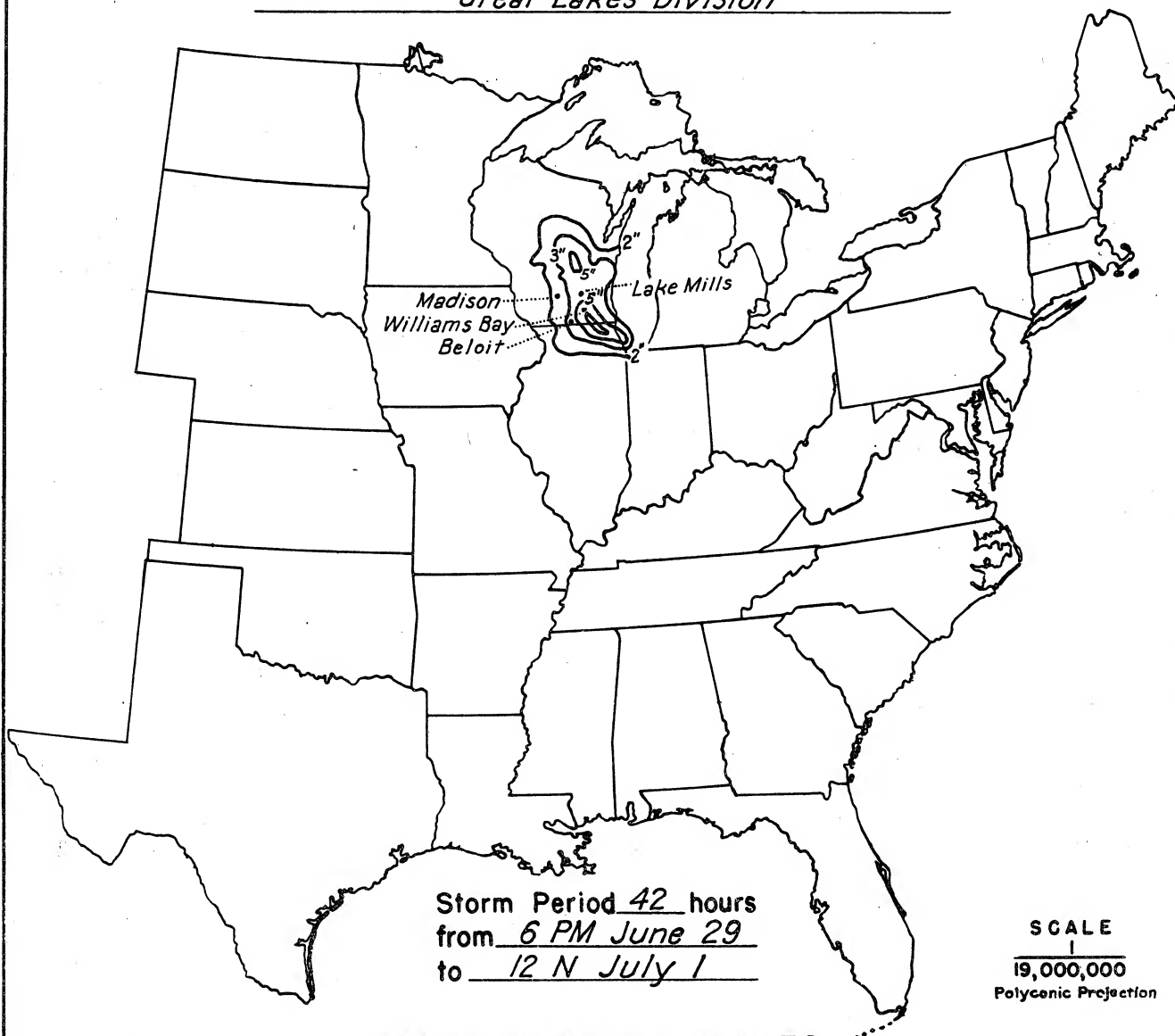
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

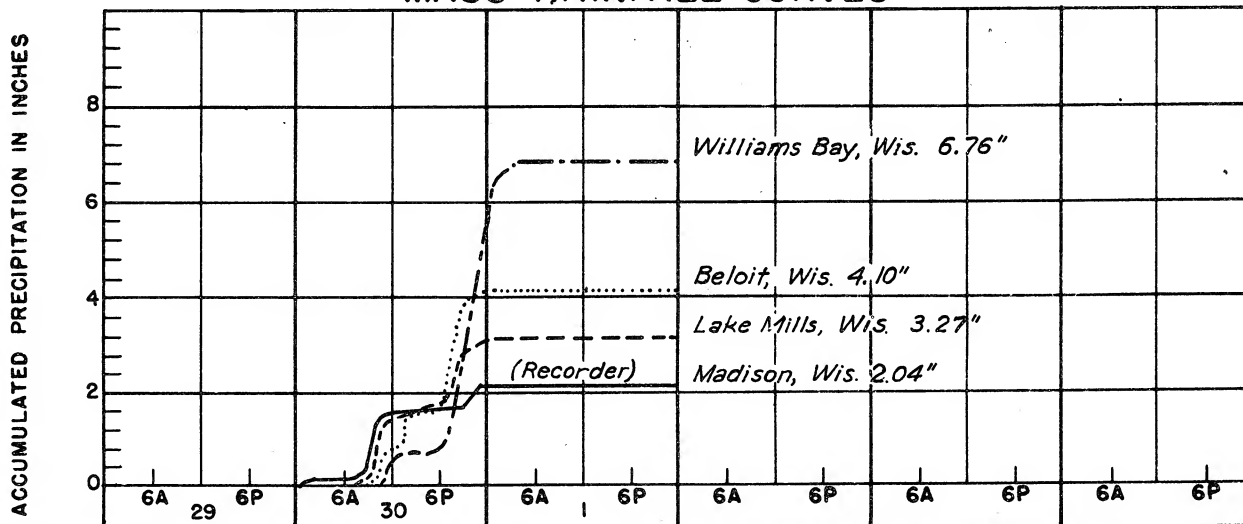
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	42					
10	7.2	8.6	10.6	11.0	11.0	11.0	11.0					
100	6.3	8.2	9.9	10.5	10.5	10.5	10.5					
200	5.8	7.8	9.4	10.0	10.0	10.0	10.0					
500	5.1	7.1	8.5	9.1	9.1	9.1	9.1					
1,000	4.5	6.4	7.6	8.2	8.3	8.3	8.3					
2,000	3.8	5.6	6.6	7.1	7.2	7.3	7.3					
5,000	3.0	4.3	5.1	5.6	5.6	5.9	5.9					
10,000	2.3	3.2	3.9	4.4	4.8	4.8	4.8					
20,000	1.6	2.1	2.6	3.2	3.7	3.8	3.8					

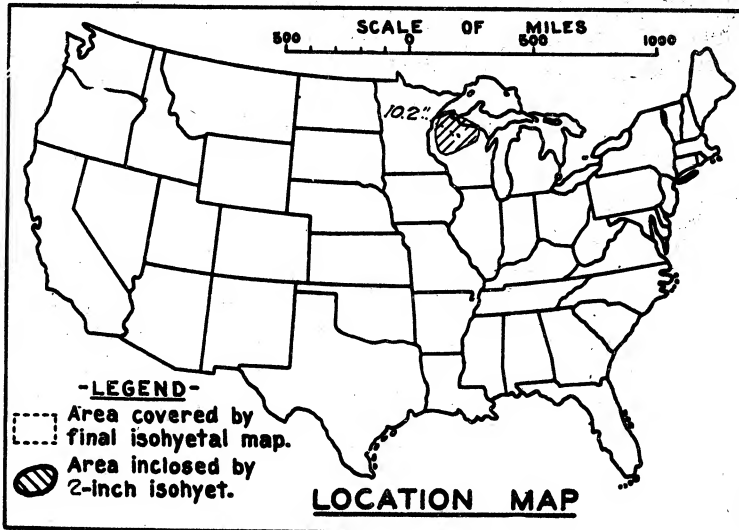
STORM STUDIES - ISOHYETAL MAP

Storm of June 29 - July 1, 1938 Assignment GL 3-11
Study Prepared by: Chicago, Ill. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 25-27 July 1897

Assignment G L 4 - 5

Location Wisconsin, Michigan

Study Prepared by:

Great Lakes Division

Milwaukee District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/20/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12-5-45

Remarks:

Center at

Butternut, Wisconsin

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	5
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	2
Misc. precip. records, meteorological data, etc.....	8
Form 5002 (Mass rainfall curves).....	5

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

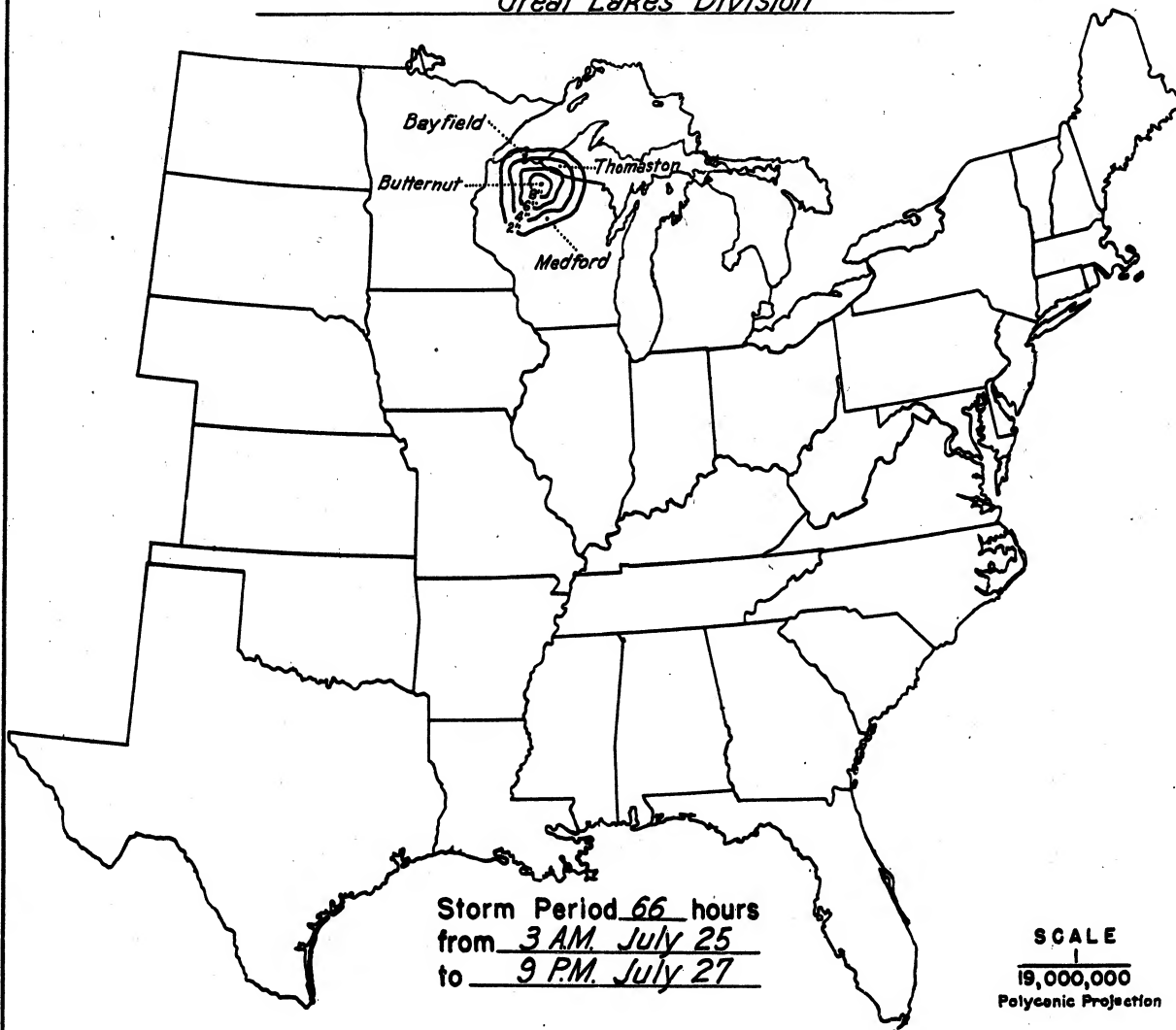
Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	2
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

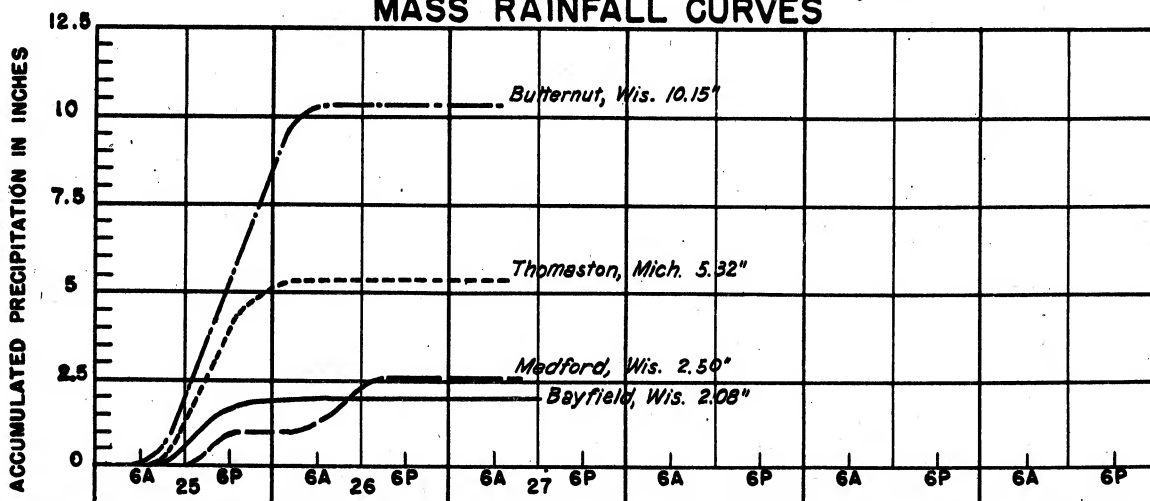
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	66					
10	3.2	6.4	9.1	10.0	10.2	10.2	10.2					
50	3.2	6.2	9.0	9.8	10.1	10.1	10.1					
100	3.1	6.1	8.9	9.6	10.0	10.0	10.0					
200	3.1	6.0	8.8	9.4	9.8	9.8	9.8					
500	2.9	5.8	8.4	9.0	9.4	9.4	9.4					
1,000	2.8	5.5	8.0	8.6	8.9	8.9	8.9					
2,000	2.6	5.2	7.5	8.0	8.3	8.3	8.3					
5,000	2.3	4.6	6.3	6.7	7.1	7.2	7.2					
10,000	1.9	3.8	5.0	5.4	5.6	5.8	5.8					
15,000	1.5	3.0	4.0	4.3	4.5	4.8	4.8					

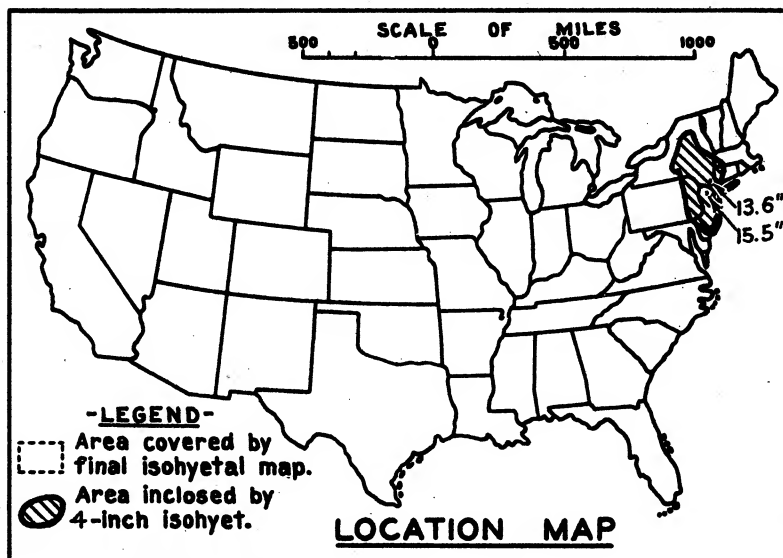
STORM STUDIES - ISOHYETAL MAP

Storm of July 25-27, 1897 Assignment GL 4-5
Study Prepared by: Milwaukee, Wis. District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Oct. 7-11, 1903

Assignment GL 4-9

Location N.Y. - N.J. - Pa.

Study Prepared by:

Great Lakes Division,

Buffalo District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/17/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/10/44

Remarks: Centers at

Patterson, N. J., Salisbury
Mills, N.Y., Point Pleasant,
Pa., and Cortland, N.Y.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	19
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	12
Misc. precip. records, meteorological data, etc.-----	4
Form 5002 (Mass rainfall curves)-----	40

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

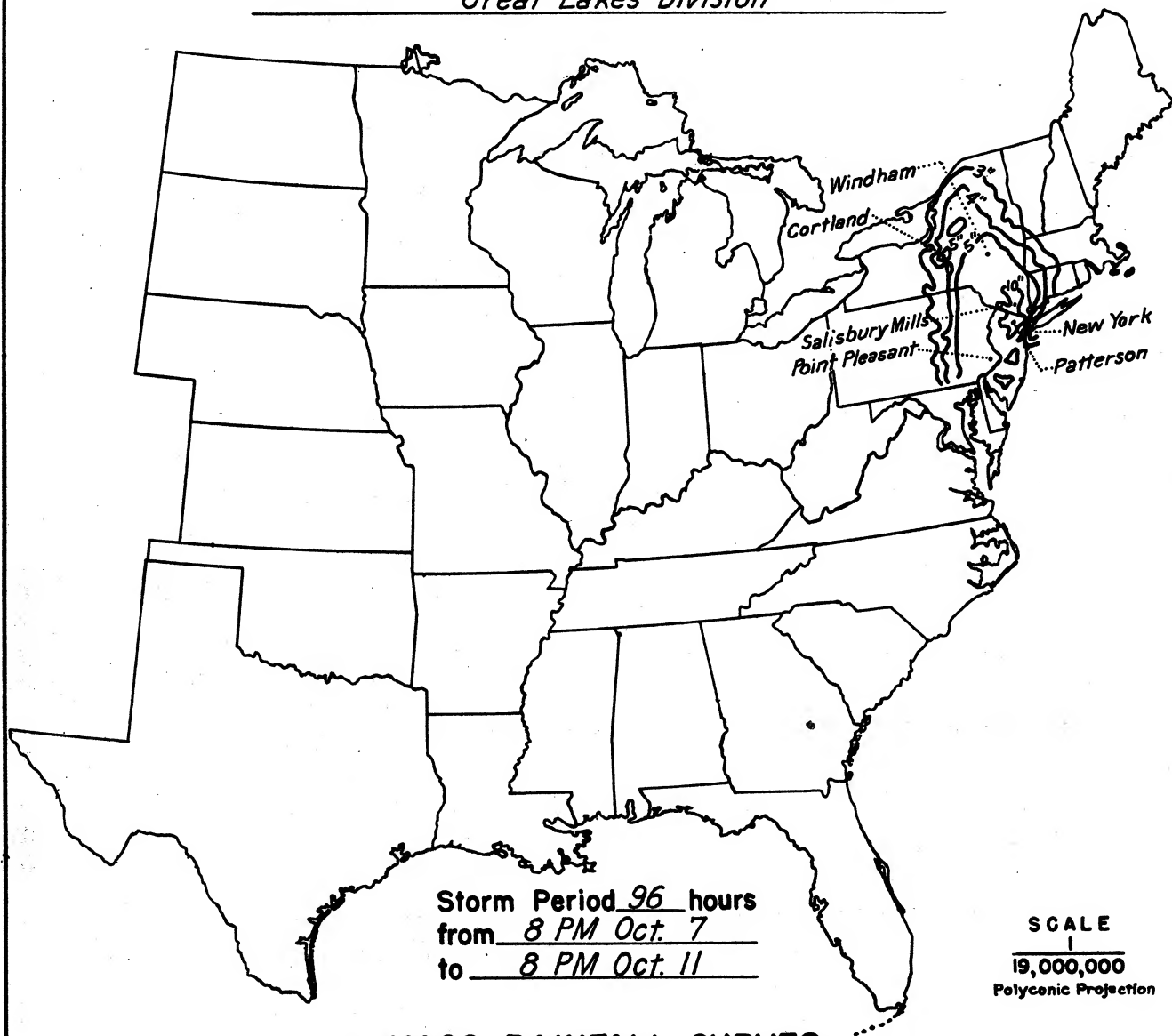
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

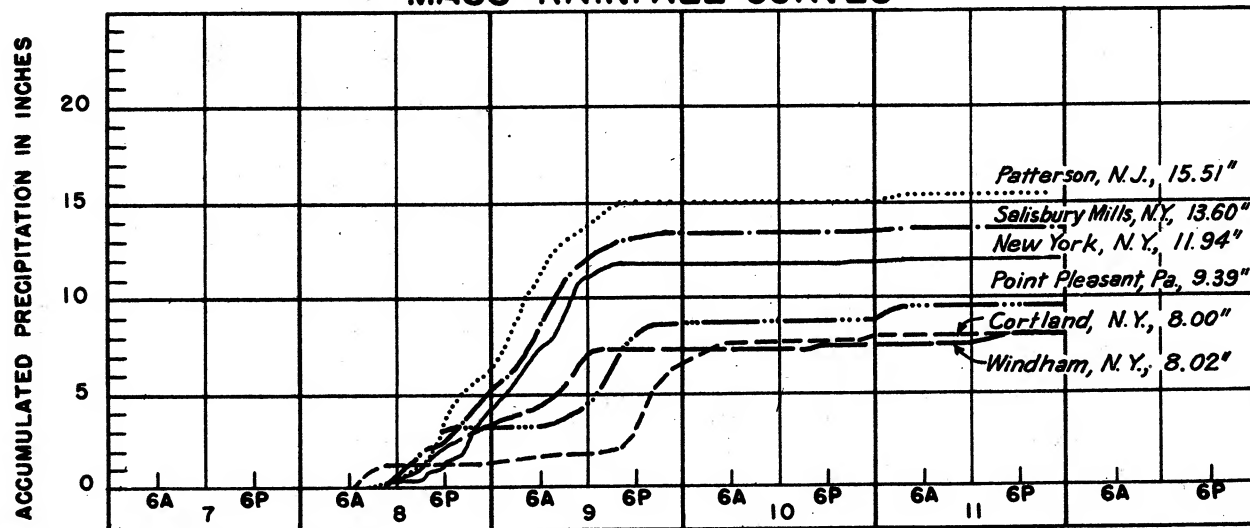
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

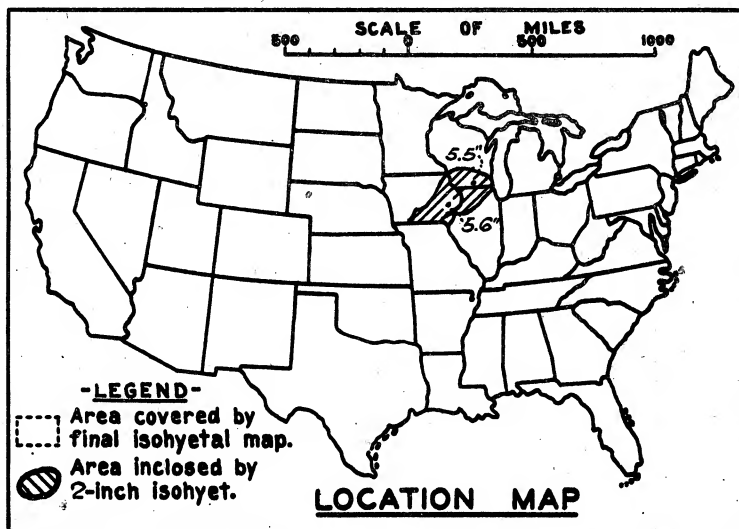
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	5.4	8.0	11.7	13.7	14.5	14.9	15.0	15.0	15.0	15.5
100	5.0	7.3	10.9	12.8	13.5	13.8	14.0	14.0	14.4	14.5
200	4.7	7.1	10.4	12.4	13.1	13.4	13.5	13.5	13.9	14.0
500	4.1	6.8	9.6	11.6	12.4	12.7	12.8	12.8	13.2	13.3
1000	3.7	6.4	8.9	10.9	11.7	12.0	12.1	12.1	12.4	12.5
2000	3.2	5.9	8.1	10.2	10.9	11.1	11.3	11.3	11.6	11.6
5000	2.6	4.9	6.9	9.0	9.6	9.7	9.9	9.9	10.2	10.2
10000	2.1	4.1	5.8	7.7	8.3	8.5	8.7	8.7	8.9	9.0
20000	1.7	3.2	4.5	6.1	6.7	7.1	7.4	7.4	7.6	7.7
35000	1.3	2.4	3.5	4.6	5.3	5.8	6.1	6.1	6.3	6.4

STORM STUDIES - ISOHYETAL MAP

Storm of October 7-11, 1903 Assignment GL 4-9Study Prepared by: Buffalo, N.Y. District
Great Lakes Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 21-27 March 1916
 Assignment G L 4 - 1/4
 Location Wisconsin, Illinois, Iowa
 Study Prepared by:

Great Lakes Division
 Milwaukee District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/21/39

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/22/46

Remarks: Centers at

Washington, Iowa and
 Beloit, Wisconsin

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	11
Form 5001-B (24-hour " " " ").....	—
Form 5001-D (" " " " " ").....	5
Misc. precip. records, meteorological data, etc.....	15
Form 5002 (Mass rainfall curves).....	15

PART II

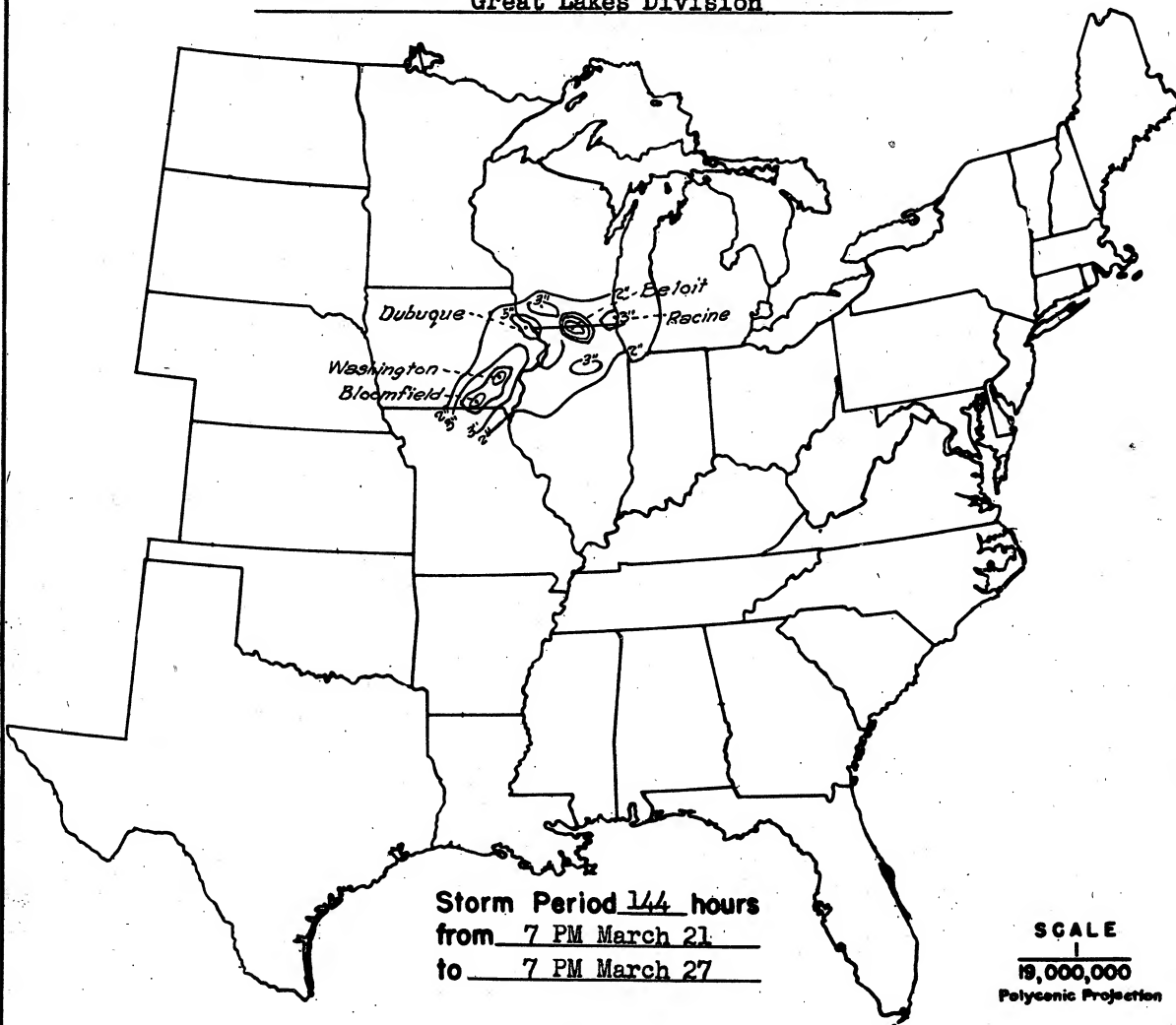
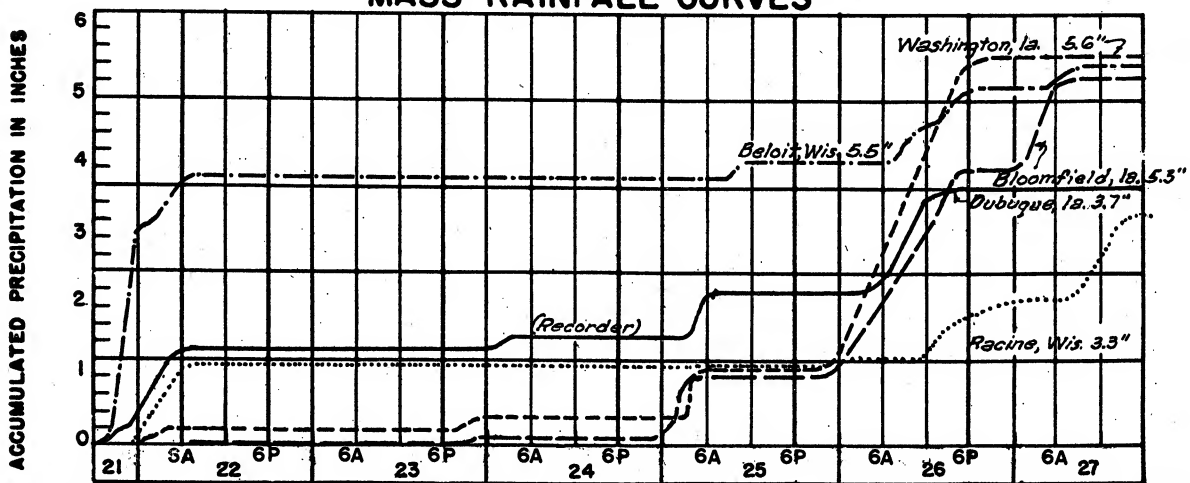
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

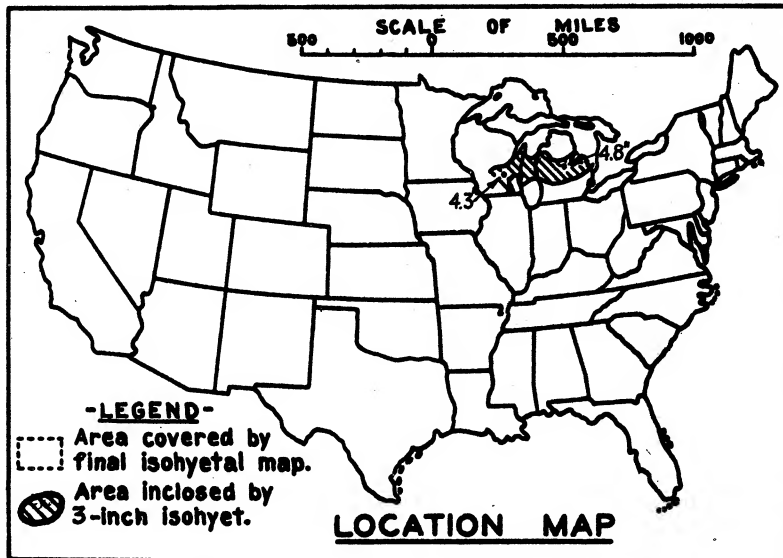
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	2
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	60	72	96	120	144
10	3.3	3.8	4.0	4.3	4.3	5.6	5.6	5.6	5.6	5.6	5.6
100	2.9	3.4	4.0	4.2	4.3	5.2	5.2	5.2	5.2	5.4	5.4
200	2.7	3.1	3.9	4.1	4.2	5.0	5.0	5.0	5.1	5.3	5.3
500	2.4	2.8	3.7	3.8	4.1	4.8	4.9	4.9	5.0	5.1	5.2
1,000	2.1	2.5	3.3	3.6	4.0	4.5	4.7	4.7	4.8	4.9	5.0
2,000	1.8	2.3	2.9	3.2	3.7	4.1	4.6	4.6	4.7	4.7	4.8
5,000	1.5	1.9	2.5	2.7	3.2	3.5	4.0	4.1	4.2	4.3	4.3
10,000	1.2	1.7	2.1	2.3	2.7	3.0	3.4	3.5	3.6	3.6	3.9
20,000	1.0	1.4	1.7	1.8	2.1	2.4	2.7	2.9	3.0	3.1	3.4
46,000	0.7	1.1	1.3	1.4	1.6	1.8	2.0	2.2	2.3	2.5	2.9

STORM STUDIES - ISOHYETAL MAPStorm of March 21-27, 1916Assignment GL 4-14Study Prepared by: Milwaukee, Wis. District
Great Lakes Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of February 19-23, 1922
 Assignment GL 4 - 17
 Location Wisconsin - Michigan
 Study Prepared by:
 Great Lakes Division
 Milwaukee District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/21/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/3/44

Remarks: Centers at
 West Branch and Benzonia,
 Mich., and Pine River, Wis.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	15
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	10
Form 5002 (Mass rainfall curves)-----	16

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

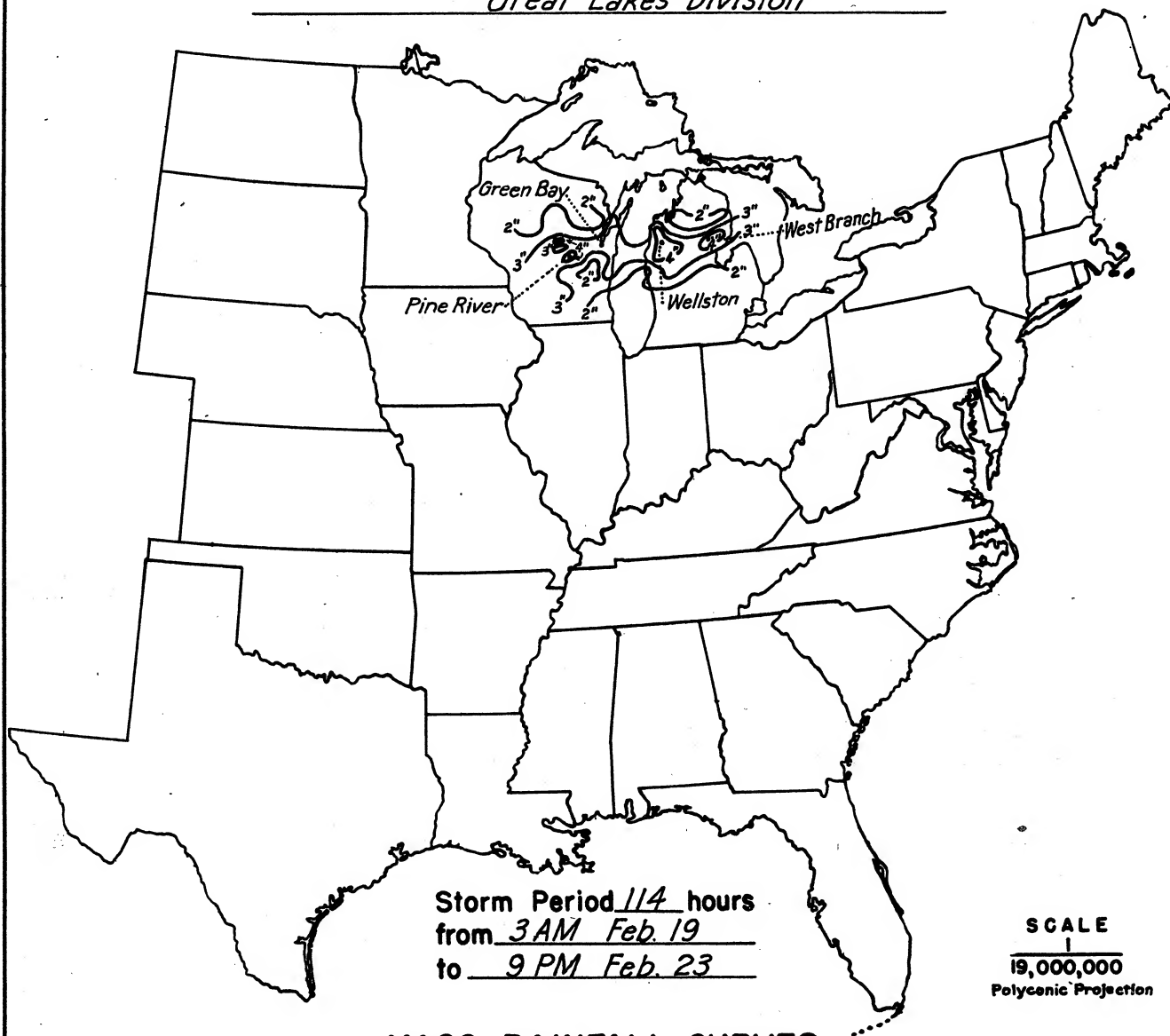
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

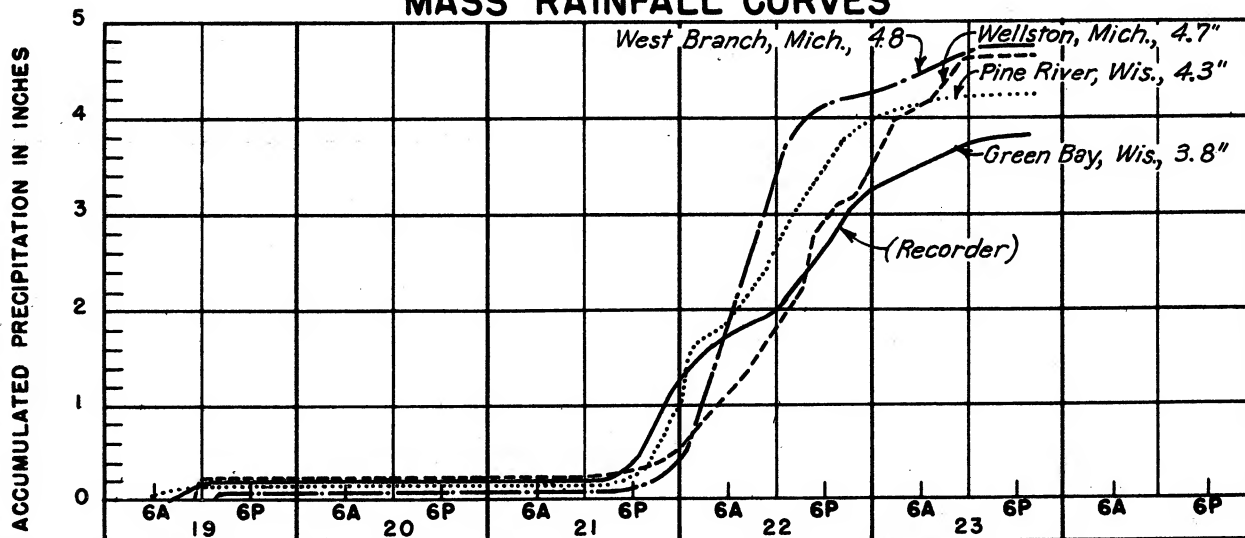
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

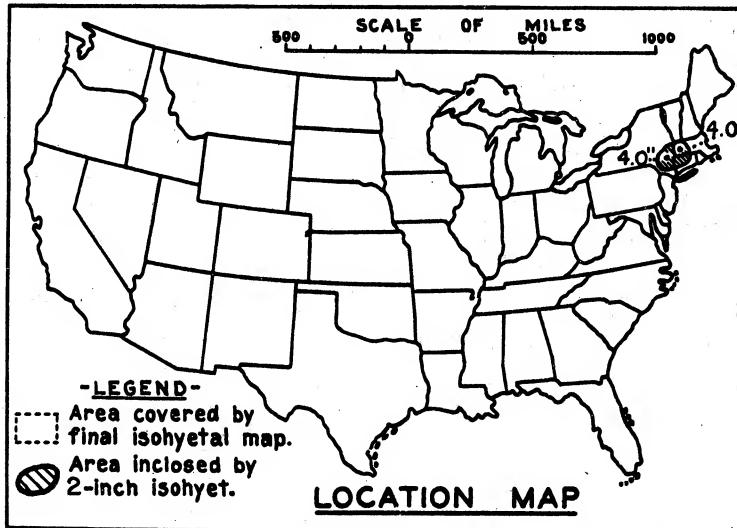
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	1.8	3.0	3.8	4.1	4.2	4.4	4.7	4.7	4.7	4.8	4.8
50	1.8	2.9	3.7	4.0	4.1	4.3	4.5	4.5	4.5	4.6	4.6
100	1.7	2.8	3.6	3.9	4.0	4.2	4.5	4.5	4.5	4.5	4.6
200	1.7	2.8	3.6	3.9	4.0	4.1	4.4	4.4	4.4	4.4	4.5
500	1.5	2.6	3.4	3.7	3.8	4.0	4.3	4.3	4.3	4.3	4.4
1,000	1.4	2.5	3.2	3.5	3.7	3.9	4.1	4.1	4.1	4.1	4.3
2,000	1.2	2.3	2.9	3.2	3.5	3.7	4.0	4.0	4.0	4.0	4.2
5,000	1.0	1.9	2.5	2.9	3.2	3.4	3.7	3.7	3.7	3.7	4.0
10,000	0.9	1.7	2.2	2.6	2.9	3.2	3.6	3.6	3.6	3.6	3.8
20,000	0.7	1.3	1.8	2.2	2.6	2.9	3.3	3.3	3.3	3.3	3.5
35,000	0.5	1.0	1.5	1.9	2.2	2.5	2.9	2.9	2.9	2.9	3.0

STORM STUDIES - ISOHYETAL MAP

Storm of February 19-23, 1922 Assignment GL 4-17Study Prepared by: Milwaukee, Wis. District
Great Lakes Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 27-28 July 1928
 Assignment G.L. 4-21
 Location N. Y., Mass., Conn.
 Study Prepared by:
 Great Lakes Division
 Buffalo District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/6/42

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/30/46

Remarks: Centers at
 High Falls, N. Y. and
 Egremont, Mass.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	16
Form 5001-B (24-hour " ")-----	--
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	6
Form 5002 (Mass rainfall curves)-----	10

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

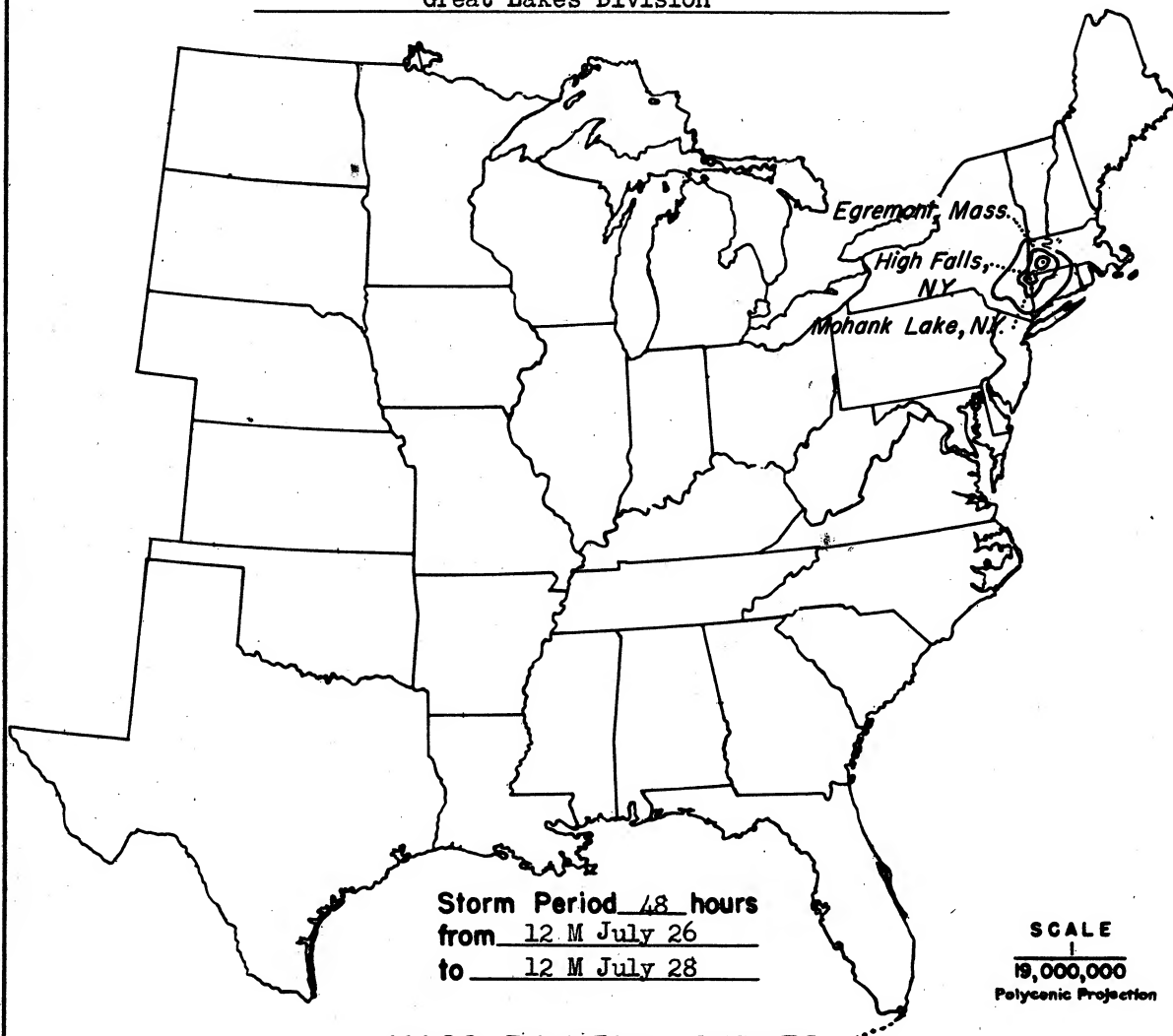
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

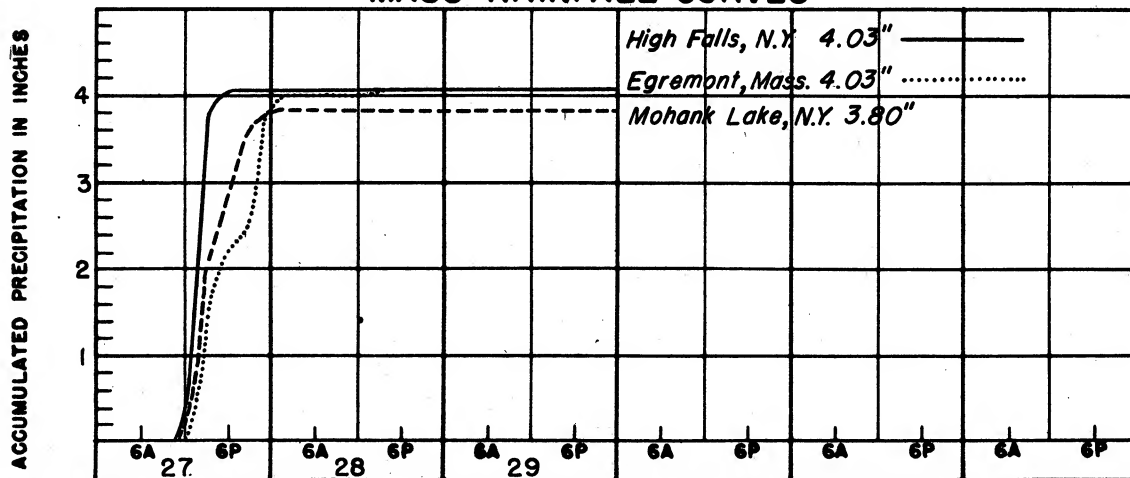
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
100	3.4	3.8	3.9	3.9	3.9	3.9	3.9					
200	3.2	3.7	3.9	3.9	3.9	3.9	3.9					
500	2.9	3.6	3.8	3.8	3.8	3.8	3.8					
1,000	2.6	3.3	3.6	3.6	3.6	3.6	3.6					
2,000	2.3	3.0	3.3	3.4	3.4	3.4	3.4					
4,800	1.8	2.5	2.7	2.8	2.8	2.8	2.8					

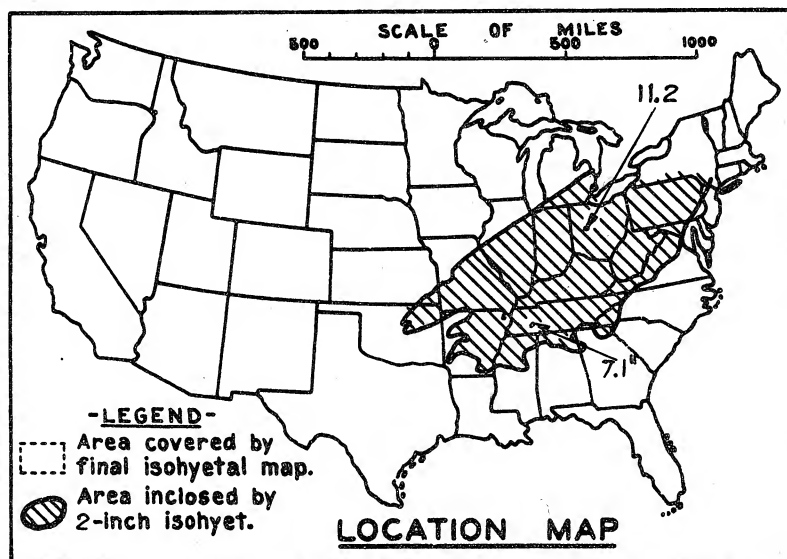
STORM STUDIES - ISOHYETAL MAP

Storm of July 27-28, 1928 Assignment GL 4-21
Study Prepared by: Buffalo, N. Y., District
Great Lakes Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of March 23 - 27, 1913

Assignment O R 1 - 15

Location Arkansas - New York

Study Prepared by:

Ohio River Division
Cincinnati District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 7/13/41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/15/45

Remarks: Centers at;

Bellefontaine, Ohio and
Savannah, Tenn.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in sheet, scale
 Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	18
Form 5001-B (24-hour " ")-----	63
Form 5001-D (" " " ")-----	1
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	62

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

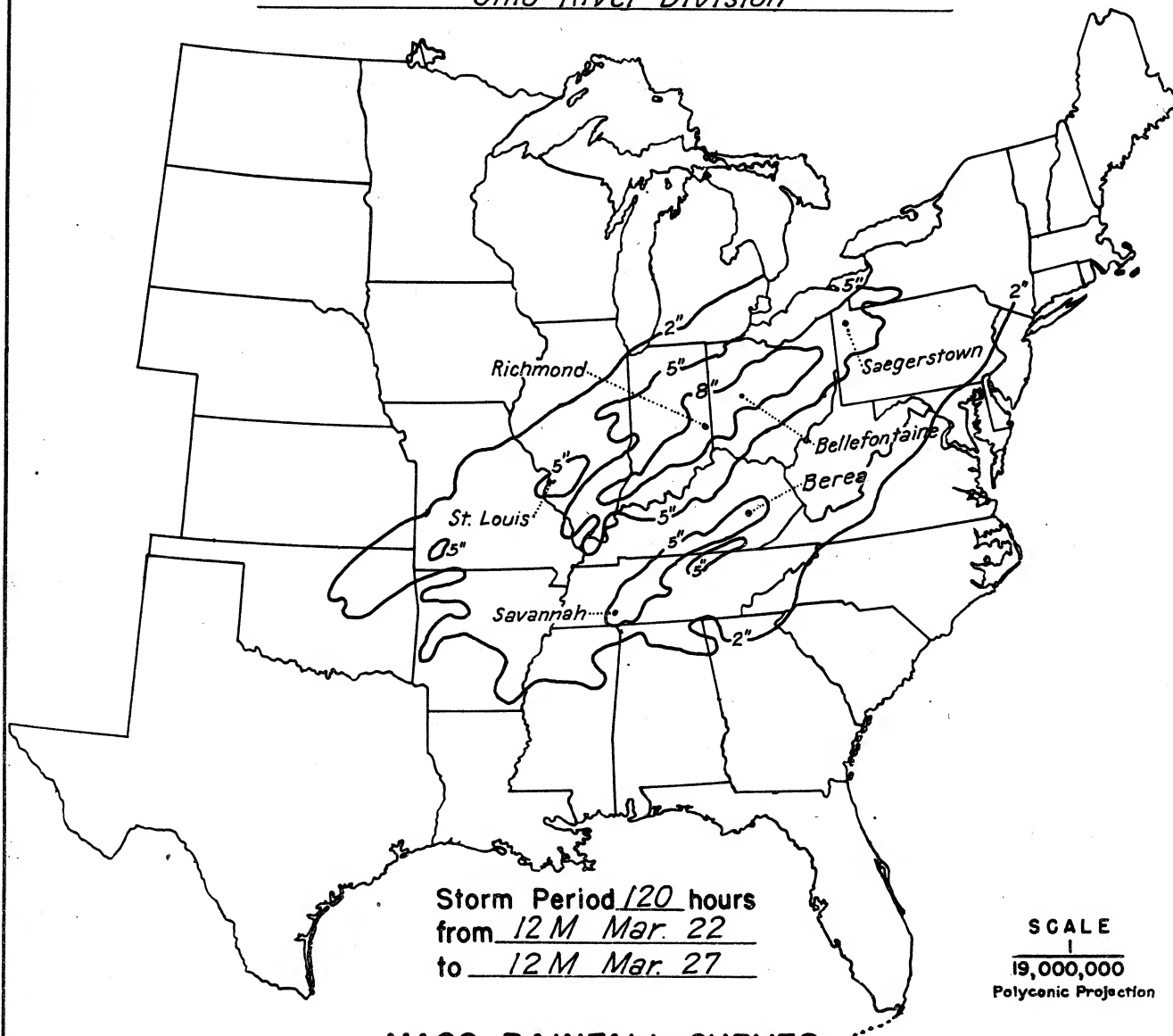
Form S-10 (Data from mass rainfall curves)-----	13
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	50
Maximum duration-depth-area curves-----	5
Data relating to periods of maximum rainfall-----	10

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

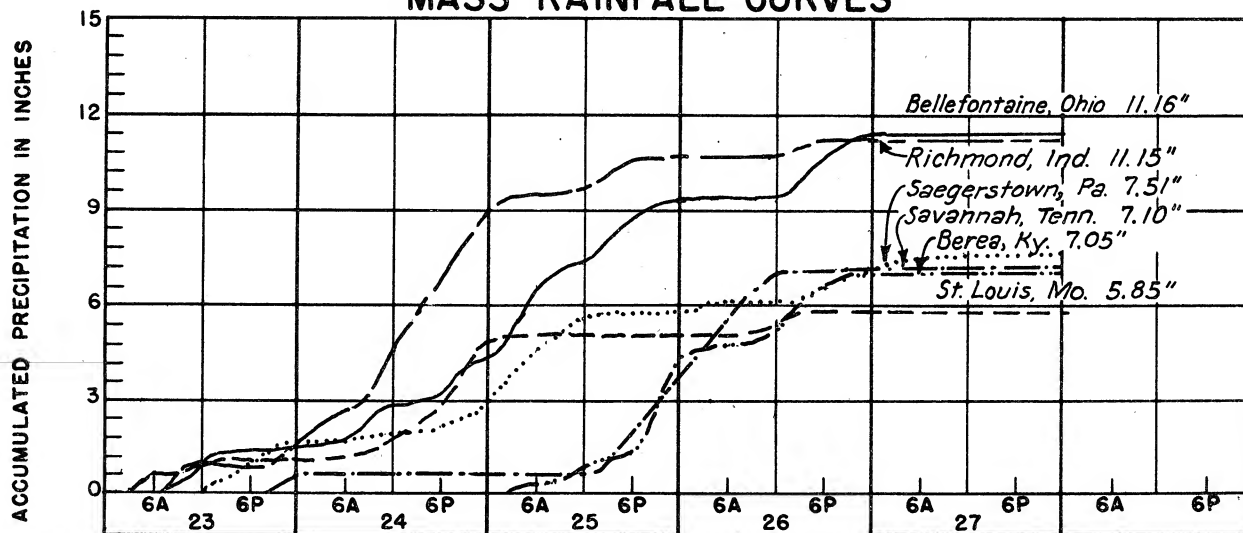
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	3.4	6.0	6.6	7.3	8.2	8.5	9.5	10.4	10.4	11.2	11.2
100	3.3	5.6	6.5	7.1	7.9	8.2	9.3	10.2	10.2	11.1	11.1
200	3.3	5.4	6.4	7.0	7.8	8.1	9.2	10.0	10.1	11.1	11.1
500	3.2	5.1	6.2	6.8	7.5	7.8	9.0	9.7	9.9	10.9	10.9
1,000	3.1	4.9	6.0	6.6	7.3	7.6	8.7	9.5	9.7	10.7	10.8
2,000	2.9	4.6	5.7	6.3	7.0	7.4	8.4	9.1	9.4	10.5	10.6
5,000	2.6	4.1	5.2	5.8	6.5	6.9	7.9	8.6	9.0	10.1	10.2
10,000	2.3	3.8	4.8	5.4	6.1	6.5	7.5	8.2	8.6	9.6	9.7
20,000	2.0	3.4	4.3	4.9	5.5	5.9	6.9	7.6	8.1	9.1	9.2
50,000	1.6	2.7	3.5	4.1	4.5	4.9	5.8	6.5	7.1	8.1	8.2
100,000	1.1	2.0	2.7	3.2	3.6	4.0	4.8	5.4	6.0	6.9	7.0
160,000	0.7	1.4	2.0	2.5	2.9	3.3	4.0	4.5	5.1	6.0	6.1

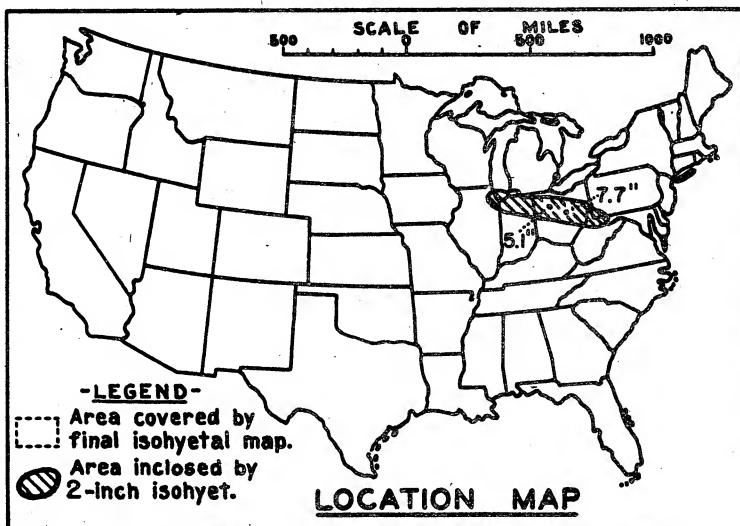
STORM STUDIES - ISOHYETAL MAP

Storm of March 23-27, 1913 Assignment OR I-15
Study Prepared by: Cincinnati, Ohio, District
Ohio River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 12-15 July 1913

Assignment OR 3-7

Location Ohio and W. Virginia

Study Prepared by:

Ohio River Division

Huntington District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/18/41Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/12/46

Remarks: Centers at

Toboso and Upper
Sandusky, Ohio**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	10
Form 5001-B (24-hour " ")-----	47
Form 5001-D (" " " ")-----	6
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	45

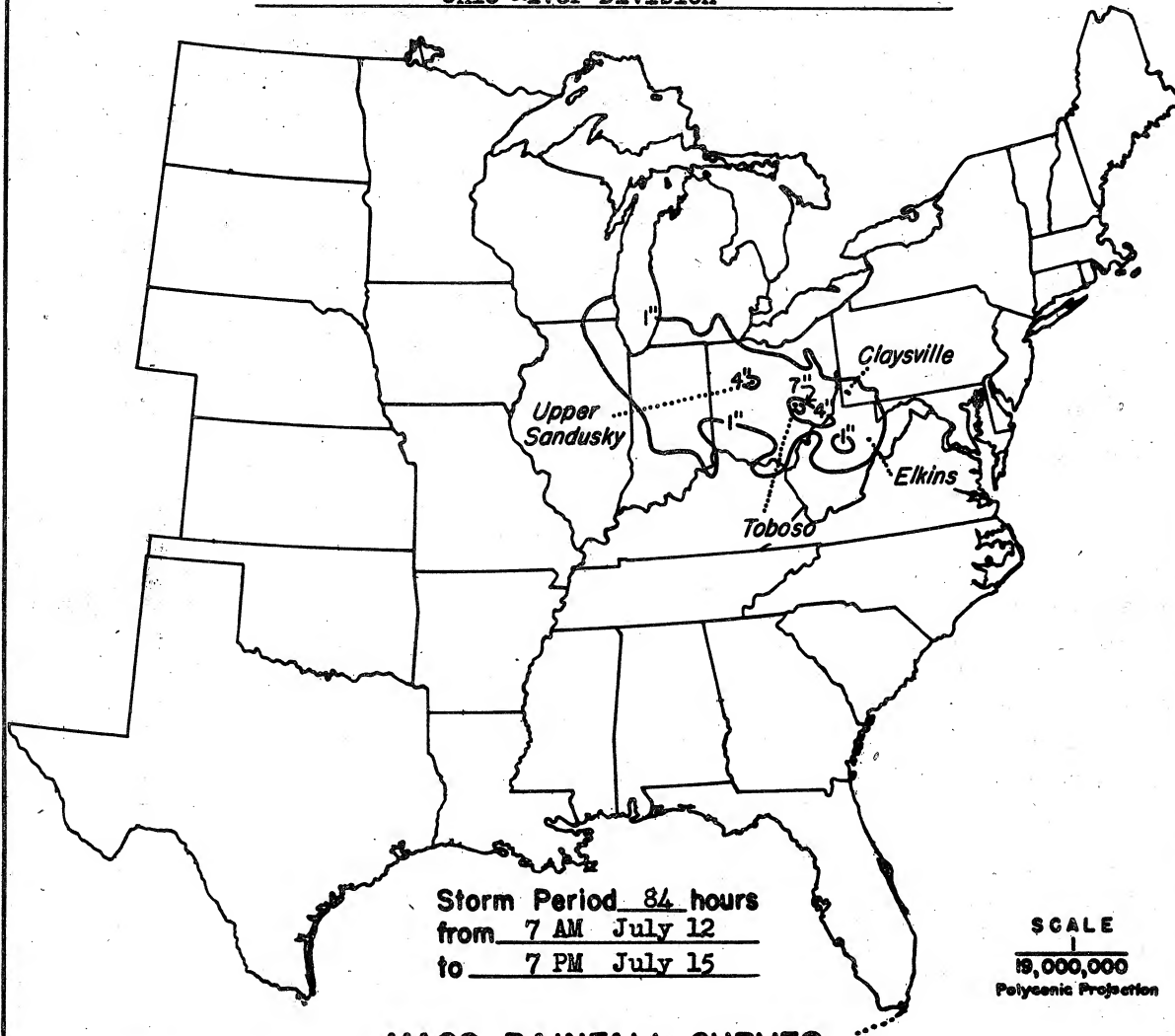
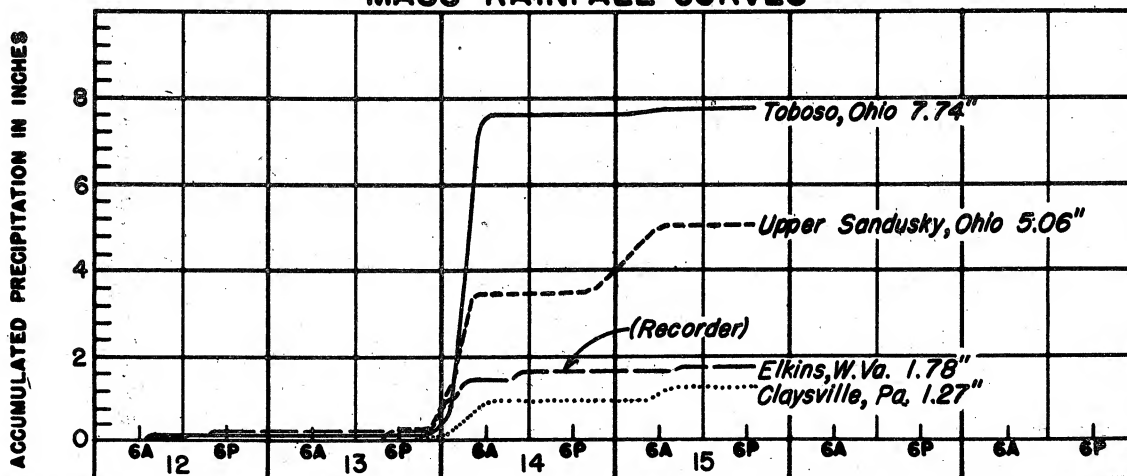
PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

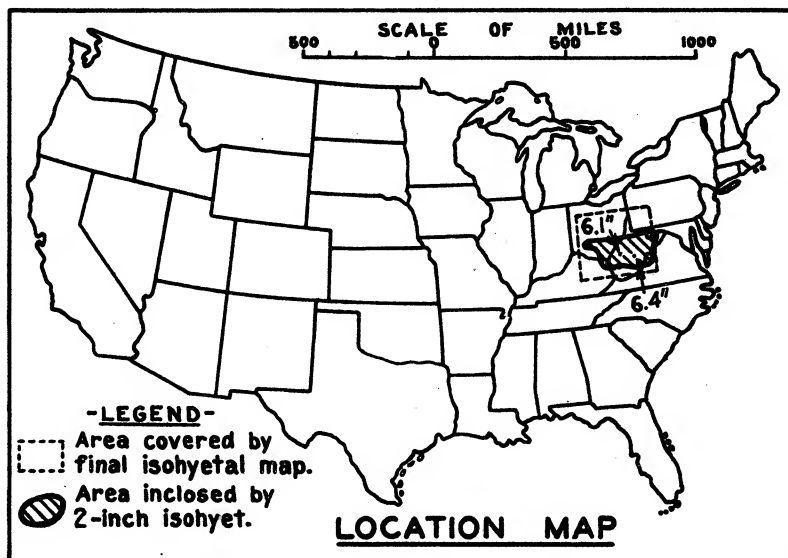
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	7.3	7.4	7.4	7.4	7.5	7.6	7.6	7.6	7.7	7.7
100	6.7	7.0	7.1	7.1	7.1	7.4	7.4	7.4	7.5	7.5
200	6.4	6.8	7.0	7.0	7.0	7.2	7.2	7.2	7.3	7.3
500	5.8	6.3	6.5	6.5	6.5	6.7	6.7	6.7	6.8	6.8
1,000	5.2	5.7	5.9	5.9	5.9	6.1	6.1	6.1	6.2	6.2
2,000	4.5	4.9	5.0	5.0	5.0	5.2	5.2	5.2	5.3	5.3
5,000	3.3	3.7	3.9	3.9	3.9	4.1	4.1	4.1	4.2	4.2
10,000	2.5	2.8	3.0	3.0	3.1	3.4	3.4	3.4	3.5	3.5
17,000	2.0	2.3	2.5	2.5	2.7	3.0	3.0	3.0	3.1	3.1

STORM STUDIES - ISOHYETAL MAPStorm of July 12-15, 1913Assignment OR 3-7Study Prepared by: Huntington, W. Va., District
Ohio River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of March 12-15, 1918

Assignment OR 3-10

Location West Virginia.

Study Prepared by:

Ohio River Division

Huntington District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 4/1/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/30/43

Remarks: Centers at :

Holcomb, Spencer and
Charleston, W. Va.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	(2 stations).....	2
Form 5001-B (24-hour " " " ").....	(93 " ").....	23
Form 5001-D (" " " " " ").....	-
Miscl. precip. records, meteorological data, etc.	-
Form 5002 (Mass rainfall curves).....	(67 " ").....	18

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

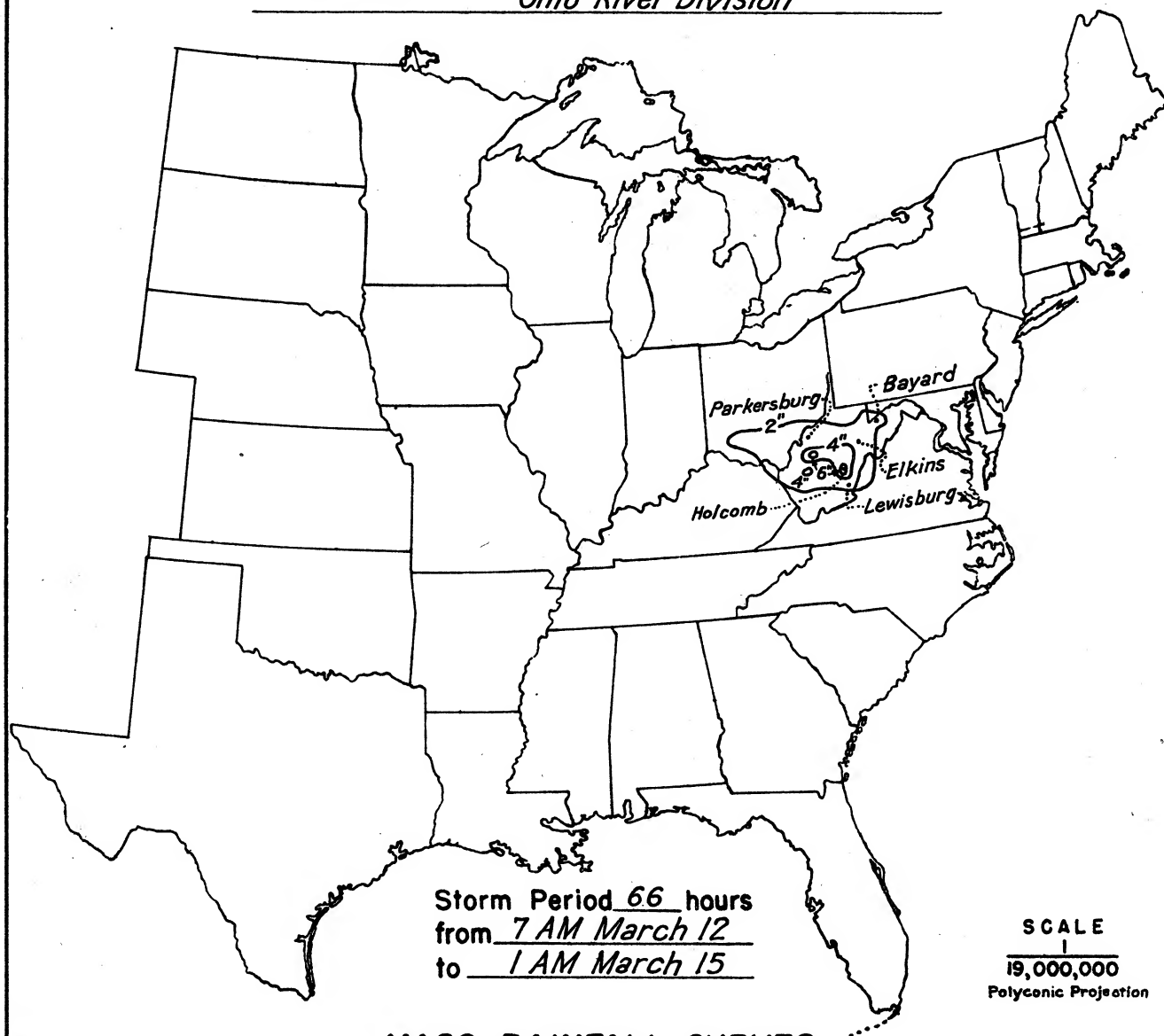
Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	7
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

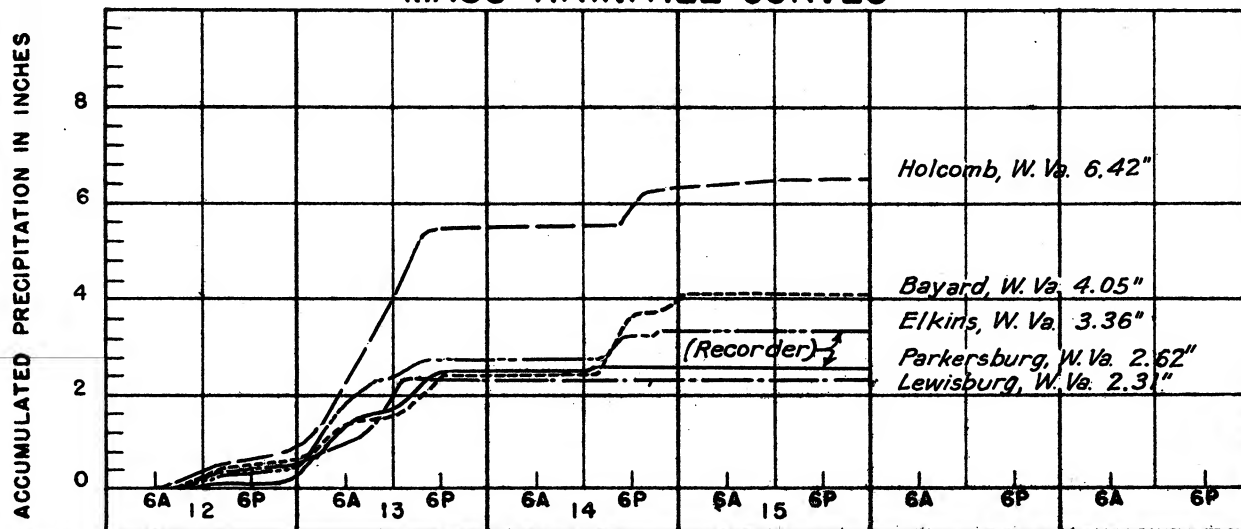
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	66	
10	2.5	4.0	4.6	5.2	5.4	5.4	5.9	6.3	6.4	
100	2.3	3.5	4.1	4.7	4.8	4.9	5.5	5.9	6.1	
200	2.2	3.3	3.9	4.5	4.5	4.8	5.4	5.7	6.0	
500	2.0	3.0	3.7	4.3	4.3	4.5	5.0	5.4	5.7	
1,000	1.8	2.9	3.5	4.0	4.0	4.4	4.8	5.2	5.4	
2,000	1.6	2.6	3.4	3.8	3.8	4.1	4.6	4.9	5.1	
5,000	1.4	2.3	3.0	3.5	3.5	3.8	4.1	4.4	4.5	
10,000	1.2	2.0	2.6	3.0	3.1	3.3	3.6	3.9	3.9	
17,000	1.0	1.8	2.2	2.6	2.7	2.8	3.2	3.4	3.4	

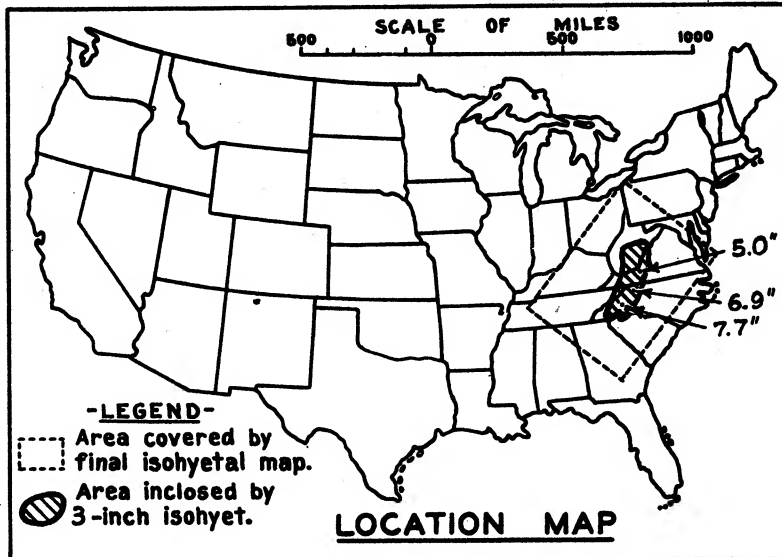
STORM STUDIES - ISOHYETAL MAP

Storm of March 12-15, 1918 Assignment OR 3-10
Study Prepared by: Huntington, W. Va. District
Ohio River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Oct. 29 - Nov. 2, 1921

Assignment OR 3-12

Location Va. and N. C.

Study Prepared by:

Ohio River Division

Huntington District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/26/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/30/43

Remarks: Centers at:

Marion, N.C., Brewers, N.C.,
and Catawba, Va.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	(19 Stations)-----	19
Form 5001-B (24-hour " ")-----	(128 ")-----	41
Form 5001-D (" " " ")-----	(62 ")-----	5
Misc. precip. records, meteorological data, etc.-----	-----	-
Form 5002 (Mass rainfall curves)-----	(81 ")-----	18

PART II

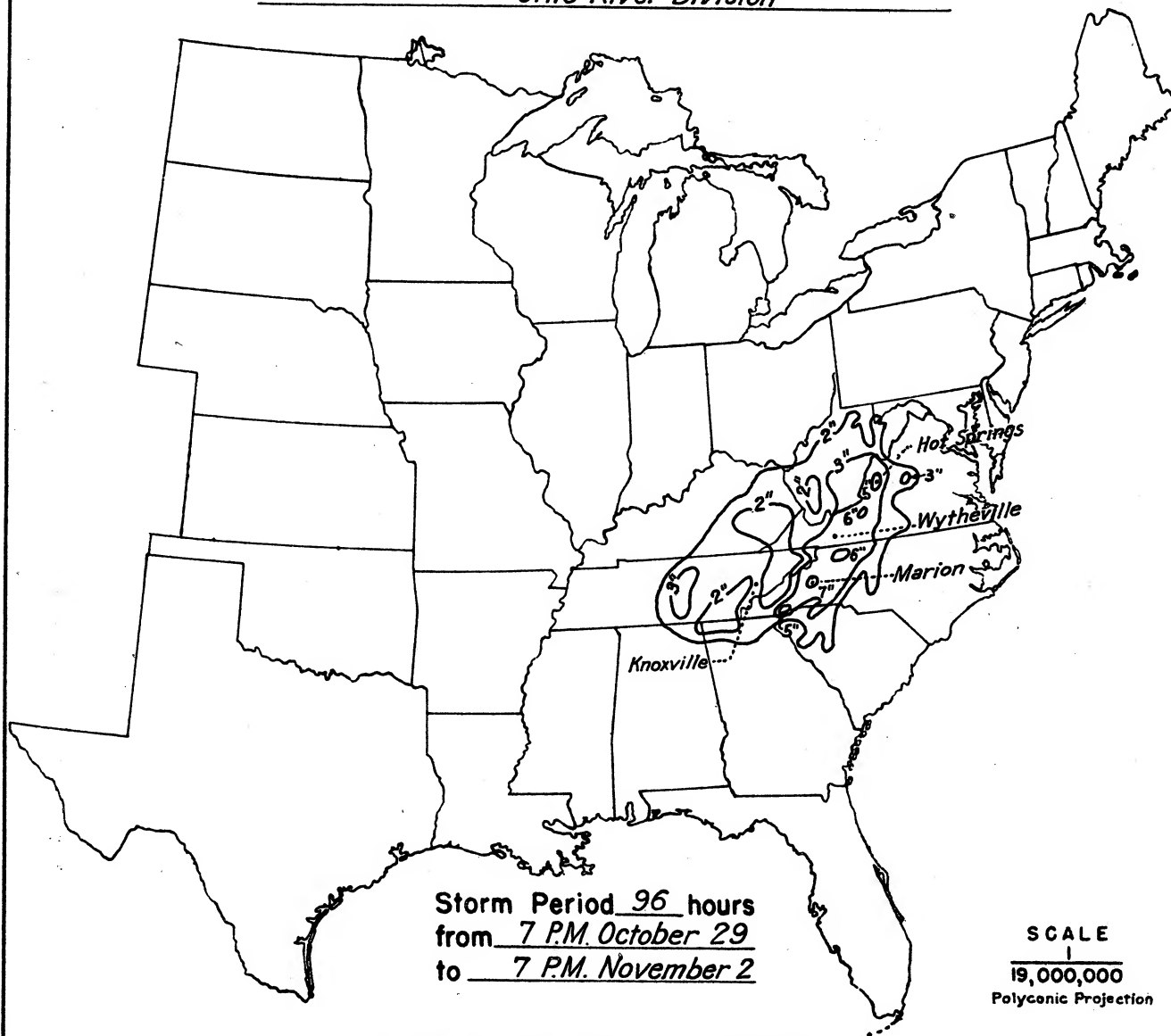
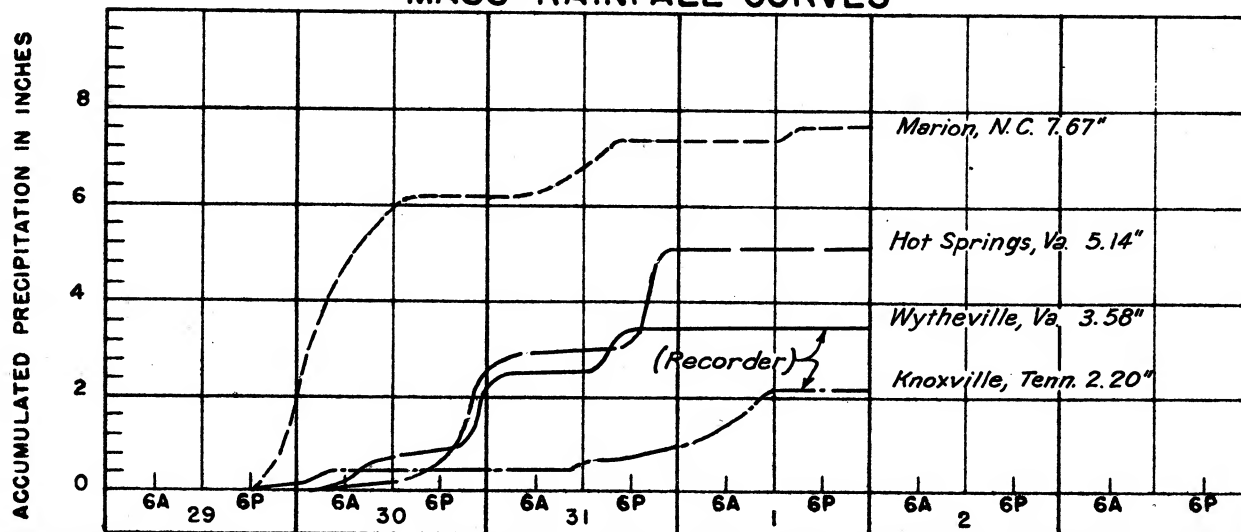
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

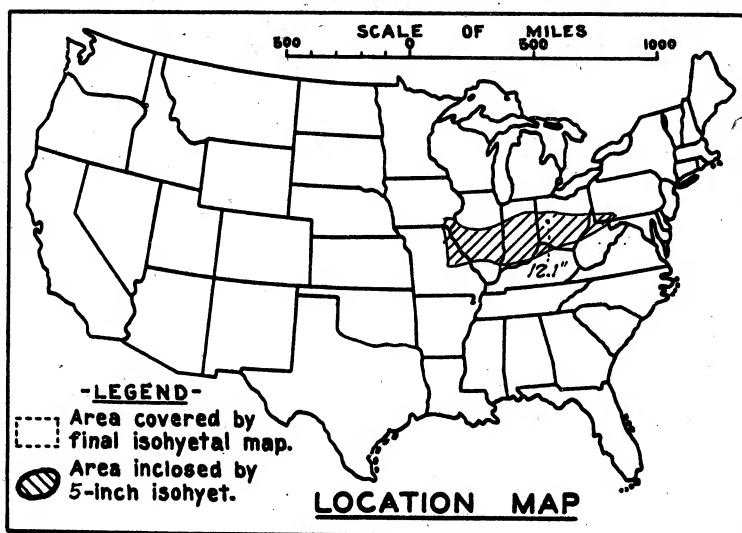
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	78	96
10	4.0	5.6	6.0	6.2	6.2	6.3	7.4	7.4	7.7	7.7	7.7
100	3.7	5.3	5.7	5.8	5.8	5.9	6.9	6.9	7.3	7.3	7.3
200	3.5	5.0	5.4	5.5	5.5	5.6	6.6	6.6	7.0	7.0	7.0
500	3.0	4.5	4.9	5.0	5.1	5.2	6.2	6.2	6.5	6.5	6.5
1,000	2.7	3.9	4.3	4.6	4.7	4.8	5.8	5.8	6.1	6.1	6.1
2,000	2.3	3.3	3.8	4.1	4.3	4.4	5.4	5.5	5.8	5.8	5.8
5,000	1.7	2.5	3.0	3.4	3.7	3.8	4.8	5.0	5.7	5.7	5.7
10,000	1.3	1.9	2.4	2.8	3.2	3.3	4.3	4.5	4.7	4.7	4.7
20,000	0.8	1.3	1.7	2.3	2.7	2.8	3.7	4.0	4.2	4.2	4.2
24,000	0.7	1.1	1.5	2.1	2.6	2.7	3.5	3.8	4.0	4.0	4.0

STORM STUDIES - ISOHYETAL MAPStorm of October 29 - November 2, 1921 Assignment OR 3-12Study Prepared by: Huntington, W. Va. District
Ohio River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 25 July-3 Aug. 1875

Assignment OR 4 - 1

Location Illinois - Ohio

Study Prepared by:

Ohio River Division

Louisville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 3/26/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/17/46Remarks: Center at
Kenton, Ohio**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)..... 0

Form 5001-B (24-hour " ")..... 45

Form 5001-D (" " " ")..... 0

Misc. precip. records, meteorological data, etc. 14

Form 5002 (Mass rainfall curves)..... 37

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)..... 2

Form S-11 (Depth-area data from isohyetal map)..... 2

Form S-12 (Maximum depth-duration data)..... 17

Maximum duration-depth-area curves..... 1

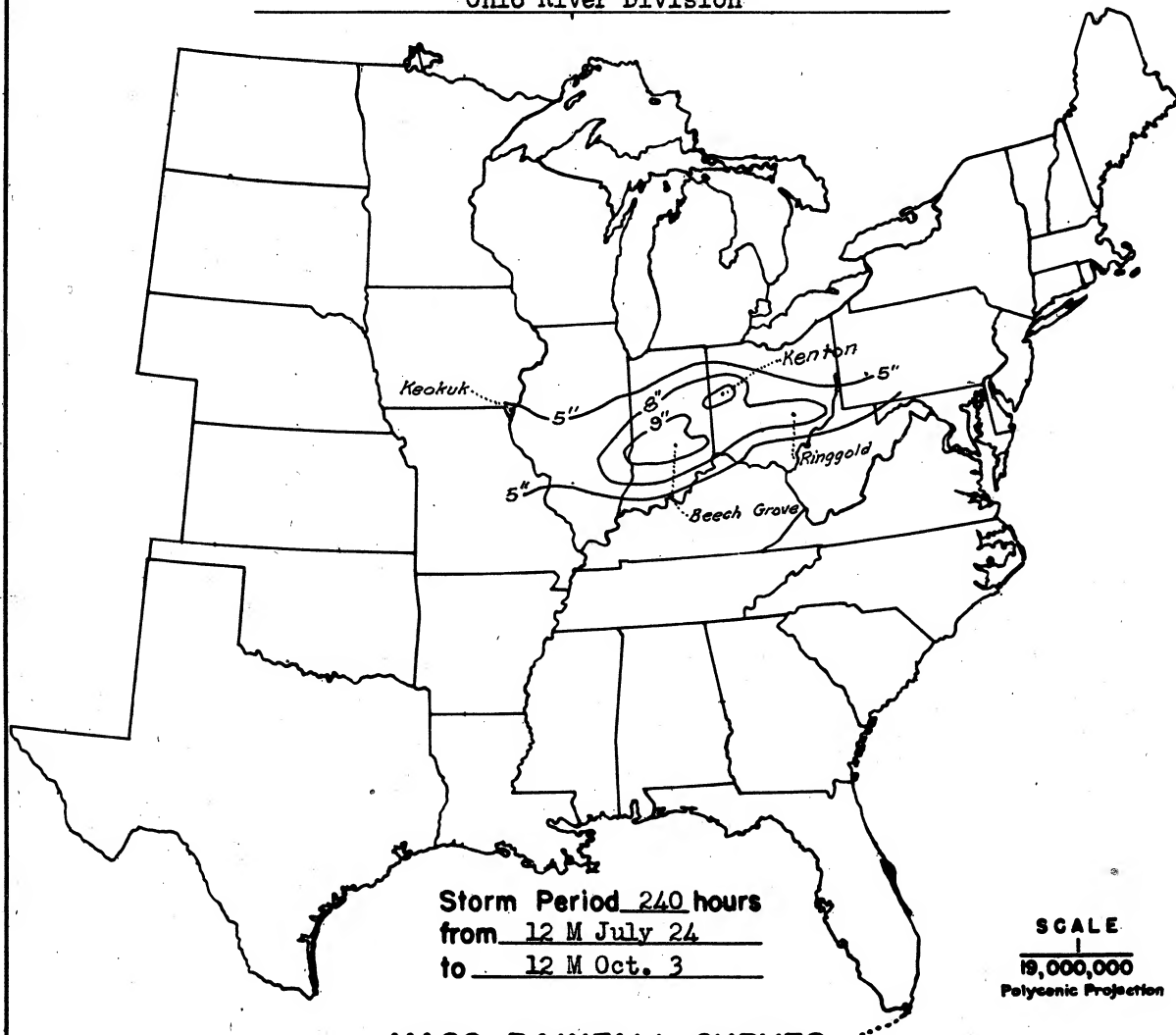
Data relating to periods of maximum rainfall..... 4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

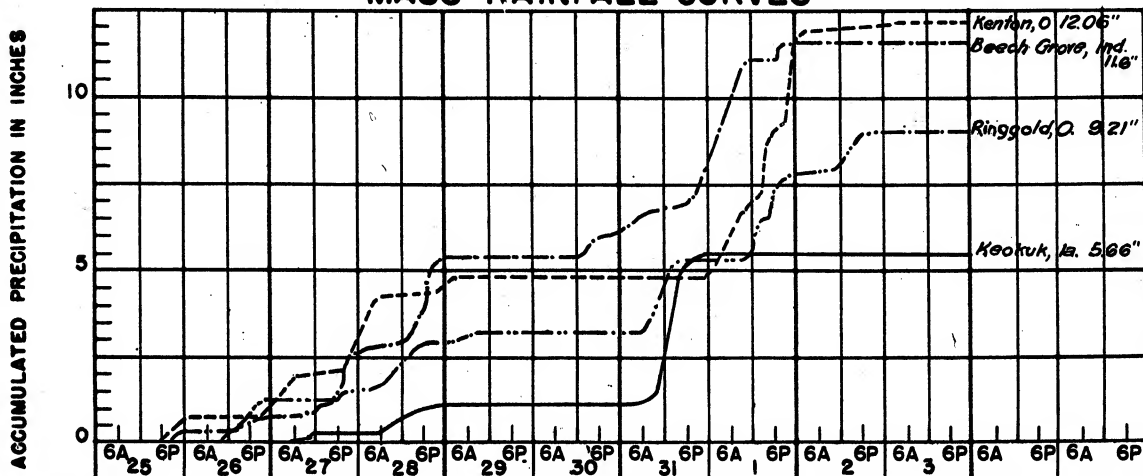
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	48	96	120	144	198	240
10	3.4	5.0	5.5	6.4	7.0	7.1	8.4	10.3	11.2	12.0	12.1
100	3.1	4.2	4.9	6.2	7.0	7.1	8.3	10.0	11.0	11.9	12.0
200	2.9	3.8	4.6	6.0	6.8	6.9	8.1	9.8	10.8	11.8	11.9
500	2.6	3.4	4.3	5.6	6.4	6.6	7.8	9.3	10.4	11.5	11.6
1,000	2.3	3.1	4.0	5.2	6.0	6.3	7.4	8.7	9.9	11.1	11.3
2,000	1.9	2.8	3.8	4.8	5.6	5.9	7.0	8.1	9.2	10.8	10.9
5,000	1.6	2.5	3.3	4.1	4.8	5.2	6.3	7.4	8.5	10.2	10.3
10,000	1.5	2.4	3.0	3.6	4.1	4.6	5.9	7.0	8.0	9.7	9.8
20,000	1.3	2.3	2.8	3.3	3.7	4.2	5.4	6.6	7.6	9.2	9.3
50,000	1.0	1.8	2.3	2.6	3.0	3.8	4.6	6.0	6.8	8.1	8.3
82,800	0.6	1.2	1.6	2.0	2.4	3.2	4.0	5.2	6.1	7.1	7.3

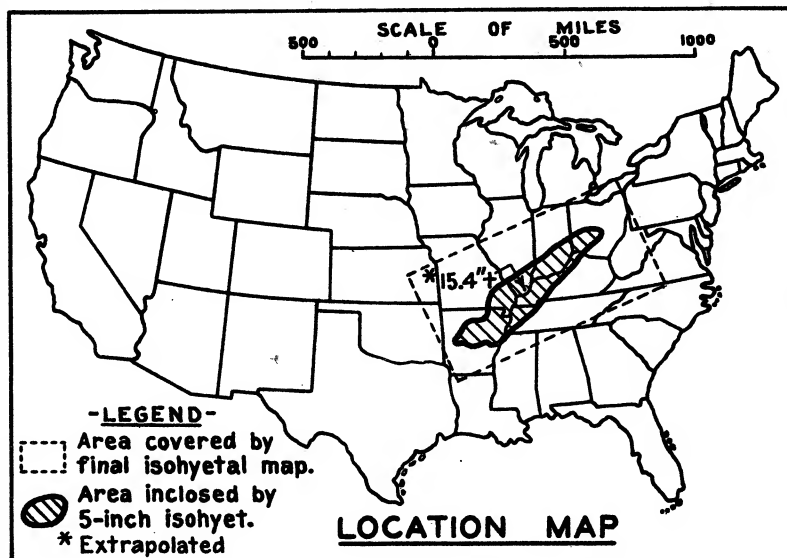
STORM STUDIES - ISOHYETAL MAP

Storm of July 25- August 3, 1875 Assignment OR 4-1
Study Prepared by: Louisville, Ky. District
Ohio River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 3-6, 1910

Assignment OR 4-8

Location Arkansas - Ohio

Study Prepared by:

Ohio River Division

Louisville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8/7/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/15/44

Remarks: Centers at :

Golconda, Ill., Marked Tree, Ark.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:1,000,000 & 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	19
Form 5001-B (24-hour " ")-----	43
Form 5001-D (" " " ")-----	18
Misc. precip. records, meteorological data, etc.-----	116
Form 5002 (Mass rainfall curves)-----	107

PART II

Final isohyetal maps, in 2 sheets, scale 1:1,000,000

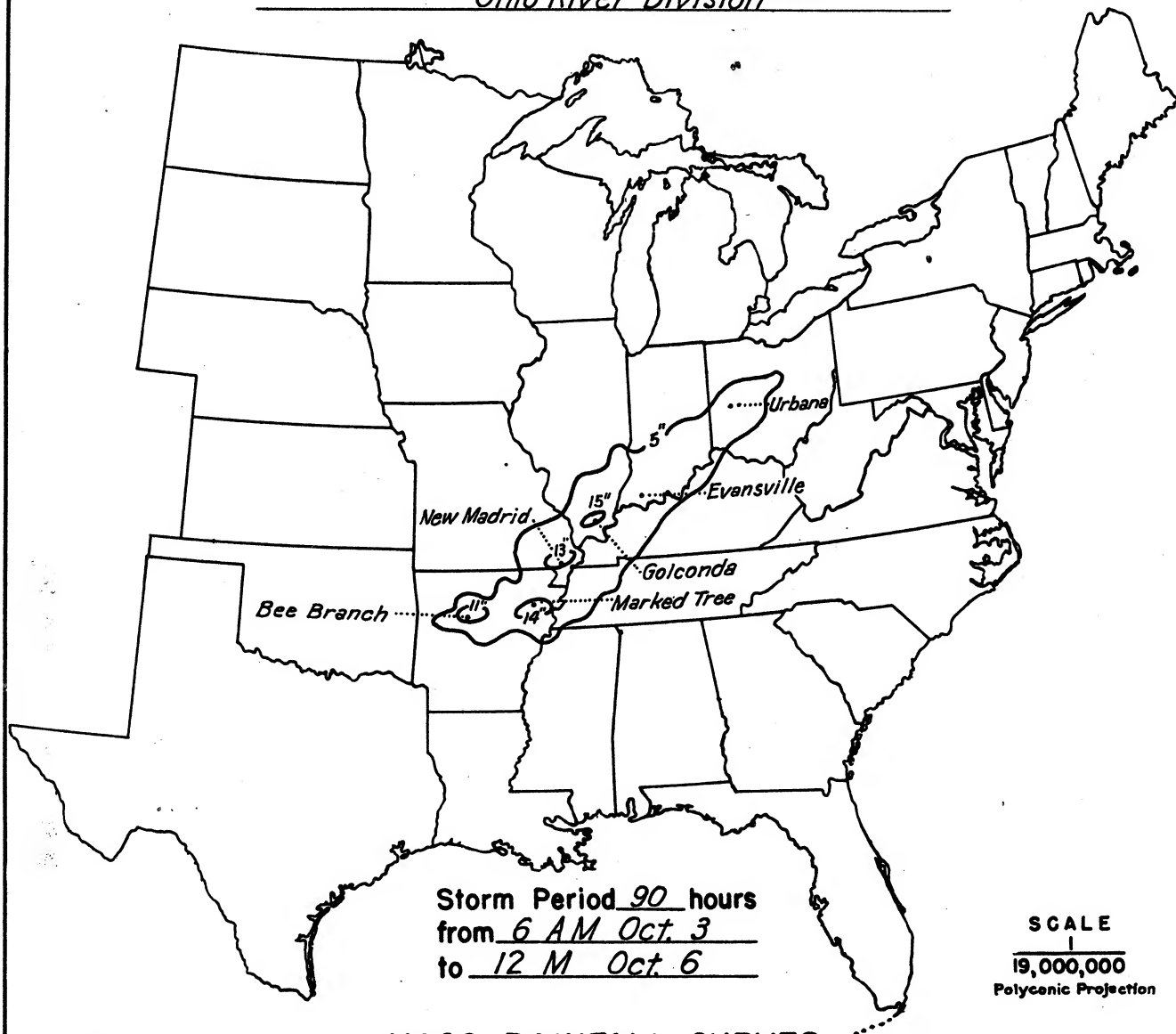
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	27
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

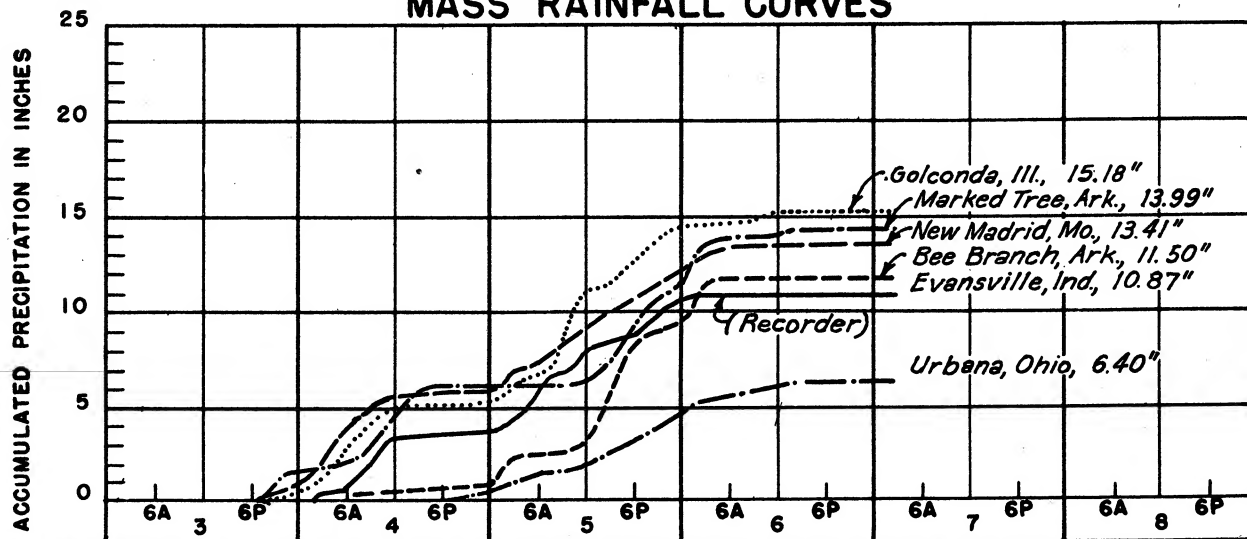
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

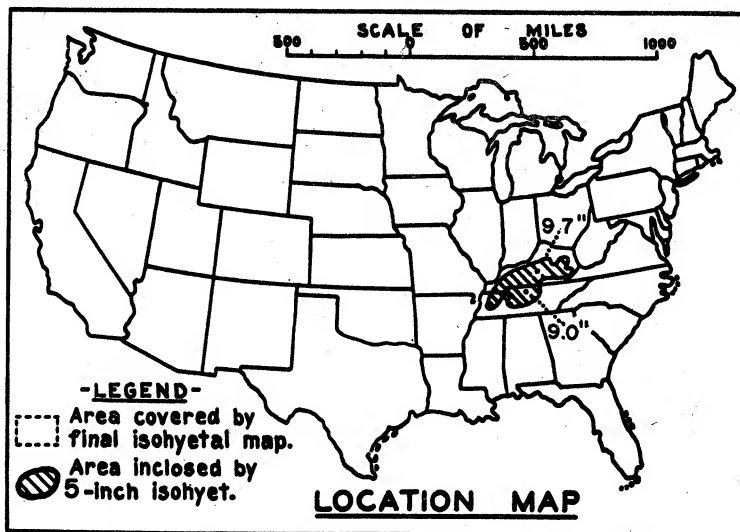
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	90
10	4.2	6.3	7.6	9.0	9.8	10.8	13.6	15.1	15.4	15.4
100	4.1	6.2	7.4	8.9	9.7	10.7	13.4	14.8	15.1	15.1
200	4.1	6.2	7.3	8.8	9.6	10.6	13.2	14.6	14.9	14.9
500	3.9	5.7	6.9	8.3	9.2	10.1	12.7	14.2	14.5	14.5
1,000	3.6	5.1	6.2	7.4	8.5	9.5	11.9	13.7	14.0	14.0
2,000	3.2	4.5	5.7	6.8	7.9	8.7	11.2	13.1	13.4	13.4
5,000	2.6	4.0	5.5	6.5	7.4	7.8	10.2	12.2	12.5	12.5
10,000	2.3	3.7	5.3	6.3	7.1	7.3	9.5	11.3	11.5	11.5
20,000	2.0	3.5	5.0	6.0	6.7	6.9	8.8	10.4	10.7	10.7
50,000	1.7	3.1	4.5	5.4	5.9	6.2	7.4	8.8	9.1	9.1
70,000	1.5	2.7	4.2	4.9	5.4	5.7	6.5	7.8	8.2	8.2

STORM STUDIES - ISOHYETAL MAP

Storm of -October 3-6, 1910 Assignment OR 4-8Study Prepared by: Louisville, Ky. District
Ohio River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 4-8 December 1924.

Assignment OR 4-18

Location Tenn. - Ky.

Study Prepared by:

Ohio River Division

Louisville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5/29/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/23/46Remarks: Centers at
Brownsville, Ky. and Cedar
Hill, Tenn.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	<u>15</u>
Form 5001-B (24-hour " ")-----	<u>41</u>
Form 5001-D (" " " ")-----	<u>14</u>
Misc. precip. records, meteorological data, etc.-----	<u>57</u>
Form 5002 (Mass rainfall curves)-----	<u>42</u>

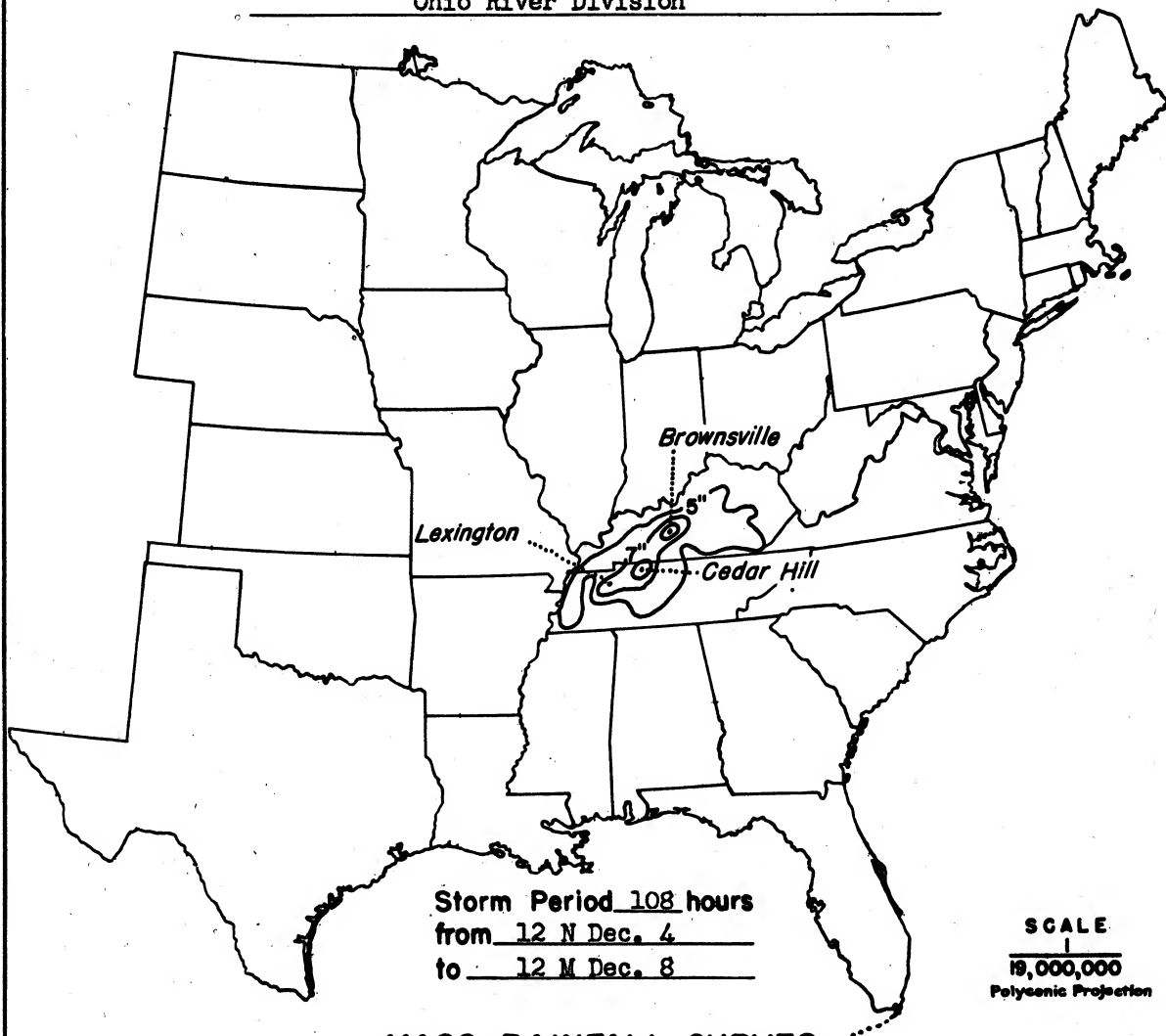
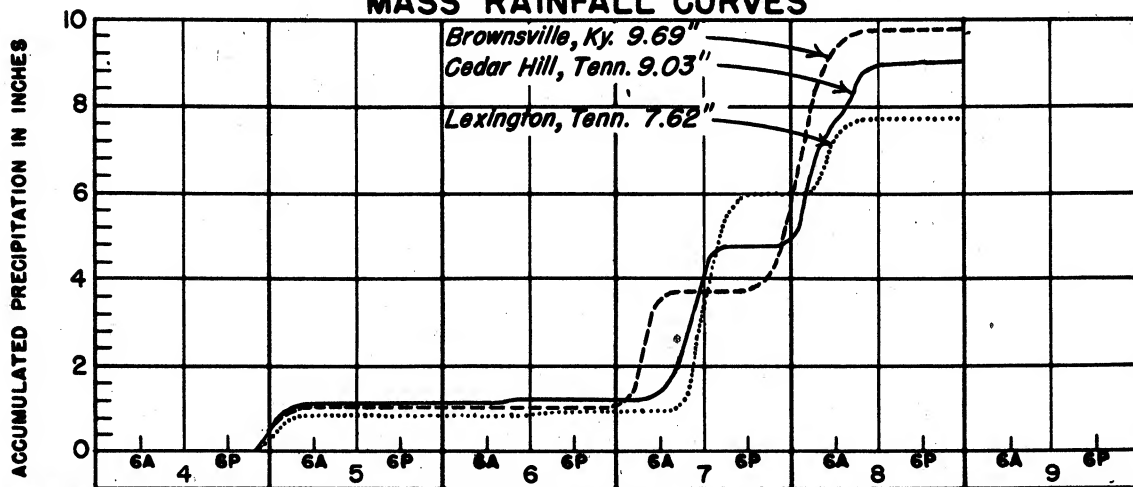
PART IIFinal isohyetal maps, in 2 sheet, scale 1:1,000,000

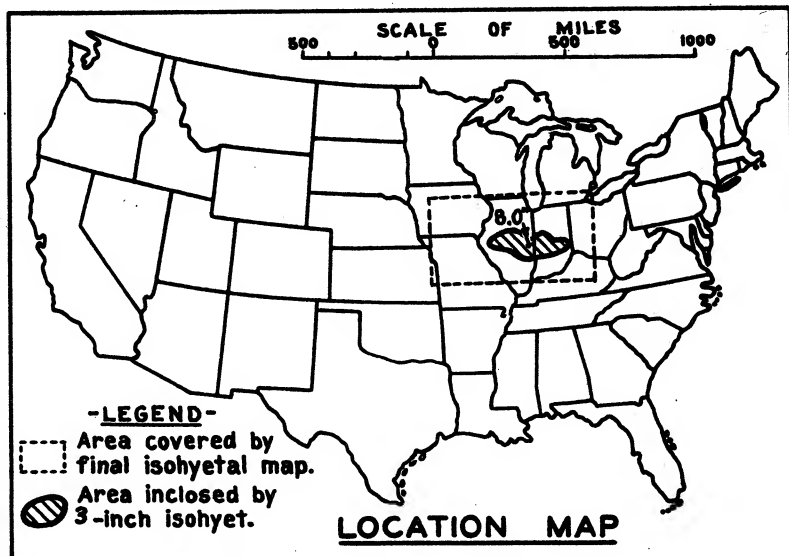
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	<u>4</u>
Form S-11 (Depth-area data from isohyetal map)-----	<u>1</u>
Form S-12 (Maximum depth-duration data)-----	<u>15</u>
Maximum duration-depth-area curves-----	<u>1</u>
Data relating to periods of maximum rainfall-----	<u>5</u>

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	72	78	96	108
10	4.8	5.9	6.2	6.9	8.5	8.6	8.6	8.6	9.3	9.7	9.7
100	4.5	5.8	6.0	6.8	8.2	8.3	8.4	8.5	9.1	9.6	9.6
200	4.3	5.7	5.9	6.7	8.1	8.2	8.3	8.5	9.0	9.5	9.5
500	3.8	5.4	5.6	6.4	7.8	7.9	8.0	8.2	8.7	9.1	9.1
1,000	3.4	4.8	5.3	6.2	7.3	7.4	7.6	7.8	8.2	8.8	8.8
2,000	2.9	4.2	4.9	5.9	6.8	7.0	7.2	7.4	7.8	8.4	8.4
5,000	2.4	3.4	4.2	5.5	6.2	6.5	6.7	6.9	7.1	7.7	7.7
10,000	2.0	3.0	3.6	5.1	5.8	6.1	6.3	6.4	6.6	7.1	7.1
20,000	1.6	2.7	3.0	4.4	5.4	5.5	5.8	5.9	6.0	6.5	6.5
32,400	1.3	2.2	2.7	3.8	4.8	5.1	5.2	5.3	5.5	6.1	6.1

STORM STUDIES - ISOHYETAL MAPStorm of December 4-8, 1924Assignment OR 4-18Study Prepared by: Louisville, Ky. DistrictOhio River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 8-9, 1926

Assignment OR 4-22

Location Indiana-Illinois

Study Prepared by:

Ohio River Division

Louisville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5/27/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/22/44Remarks: Centers at
Charleston and Alexander, Ill.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	5
Form 5001-B (24-hour " ")-----	20
Form 5001-D (" " " ")-----	0
Misc. precip. records, meteorological data, etc.-----	13
Form 5002 (Mass rainfall curves)-----	17

PART II

Final isohyetal maps, in 2 sheets, scale 1:1,000,000

Data and computation sheets:

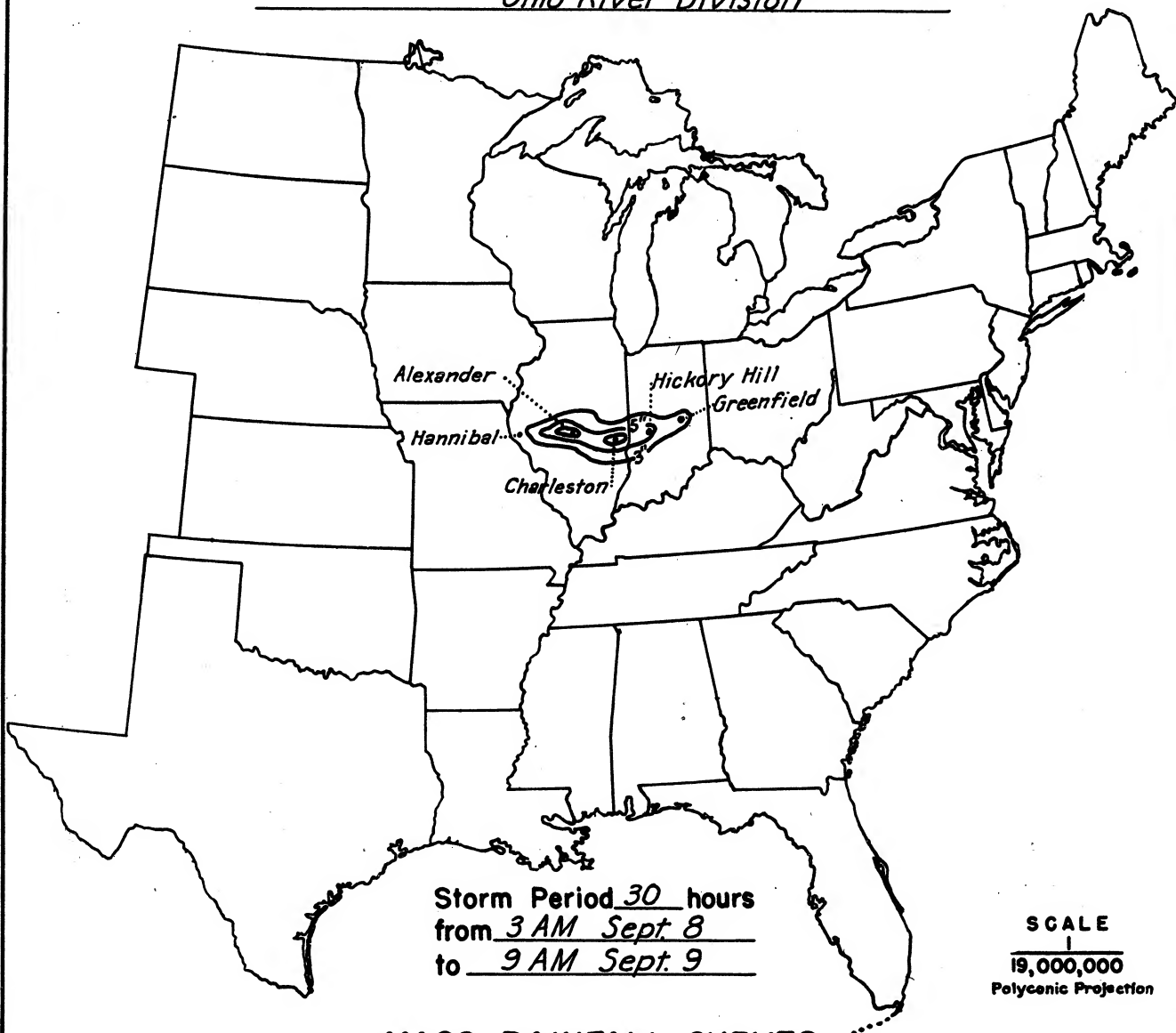
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	12
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

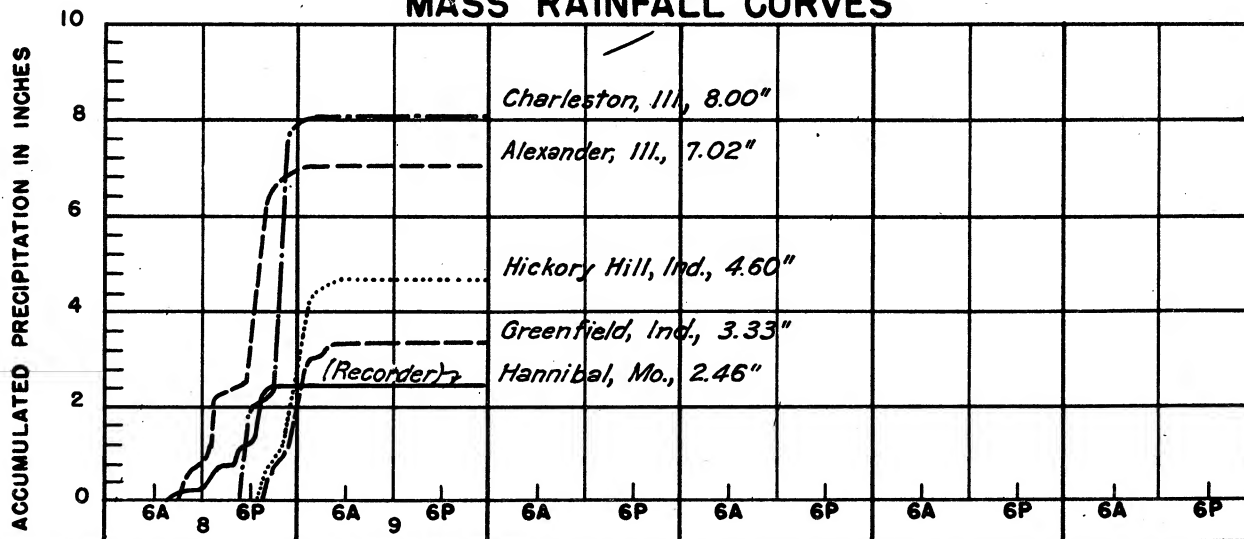
Area in Sq. Mi.	Duration of Rainfall in Hours								
	3	6	9	12	15	18	21	30	
10	5.6	5.8	7.9	8.0	8.0	8.0	8.0	8.0	
100	5.3	5.7	7.6	7.8	7.8	7.8	7.8	7.8	
200	5.1	5.6	7.4	7.6	7.6	7.6	7.6	7.6	
500	4.7	5.3	6.9	7.2	7.2	7.2	7.2	7.2	
1,000	4.3	5.0	6.4	6.7	6.7	6.7	6.7	6.7	
2,000	3.8	4.6	5.8	6.2	6.3	6.3	6.3	6.3	
5,000	3.1	3.9	4.9	5.4	5.6	5.7	5.7	5.7	
10,000	2.3	3.2	4.0	4.5	4.8	4.9	4.9	4.9	
15,000	1.9	2.7	3.5	3.9	4.1	4.2	4.3	4.3	
20,000	1.5	2.4	3.1	3.5	3.7	3.8	3.9	3.9	
24,100	1.3	2.2	2.9	3.2	3.4	3.5	3.6	3.6	

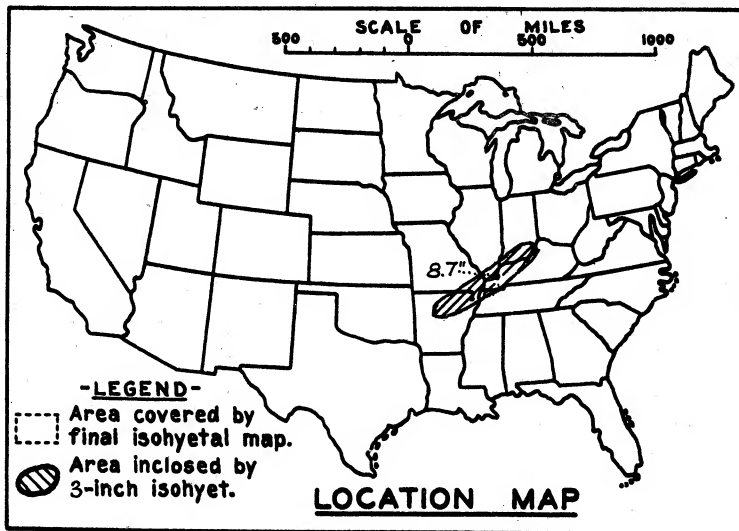
STORM STUDIES - ISOHYETAL MAP

Storm of September 8-9, 1926 Assignment OR 4-22
Study Prepared by: Louisville, Ky. District
Ohio River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 28-31 March 1938

Assignment O R 5 - 8

Location Ark. - Ind.

Study Prepared by:

Ohio River Division
Louisville District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 8/7/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/11/46Remarks: Center at
Ford's Ferry, Ky.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 56
 Form 5001-B (24-hour " ")----- 35
 Form 5001-D (" " " ")----- 20
 Misc. precip. records, meteorological data, etc.----- 176
 Form 5002 (Mass rainfall curves)----- 87

PART II

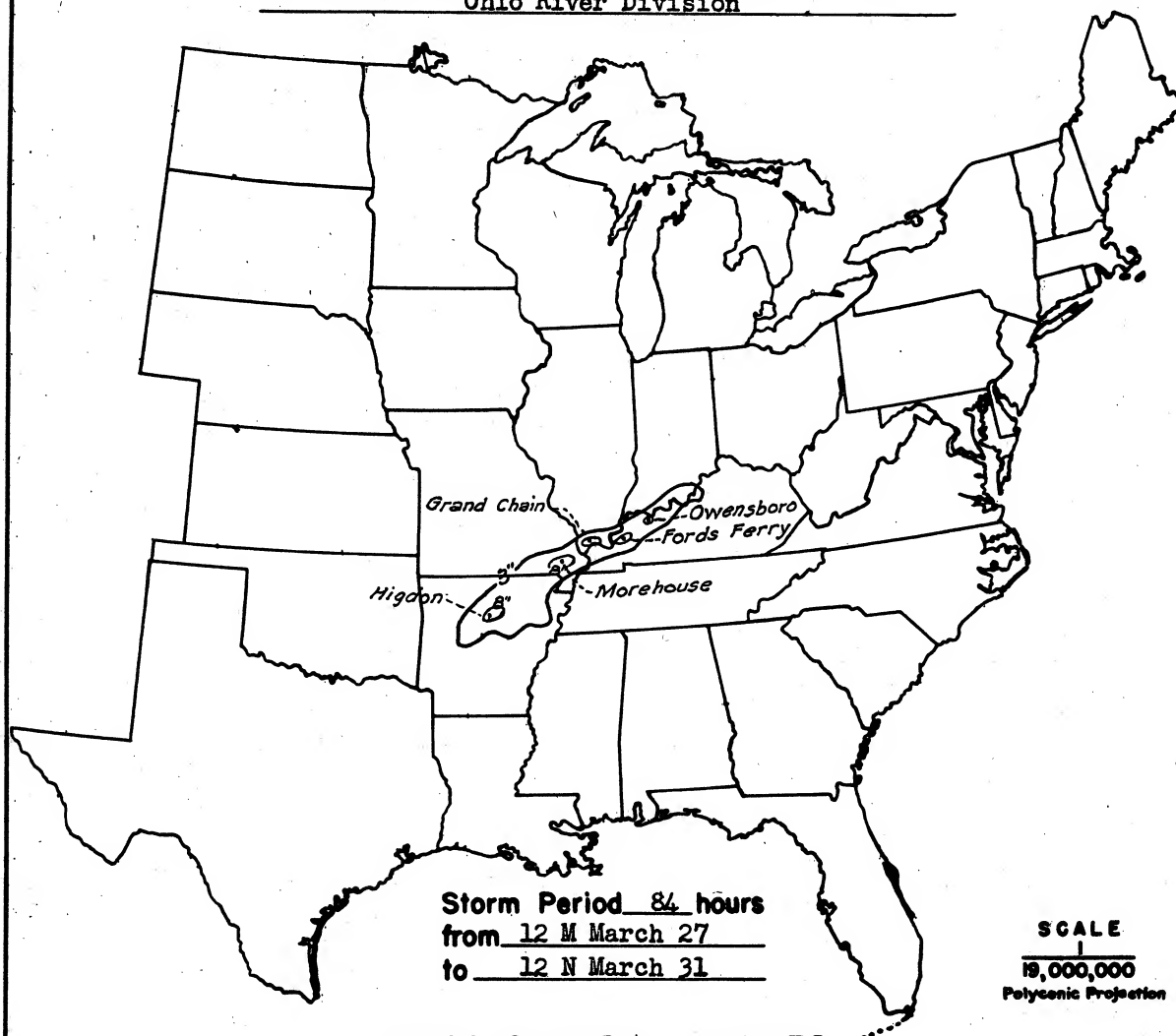
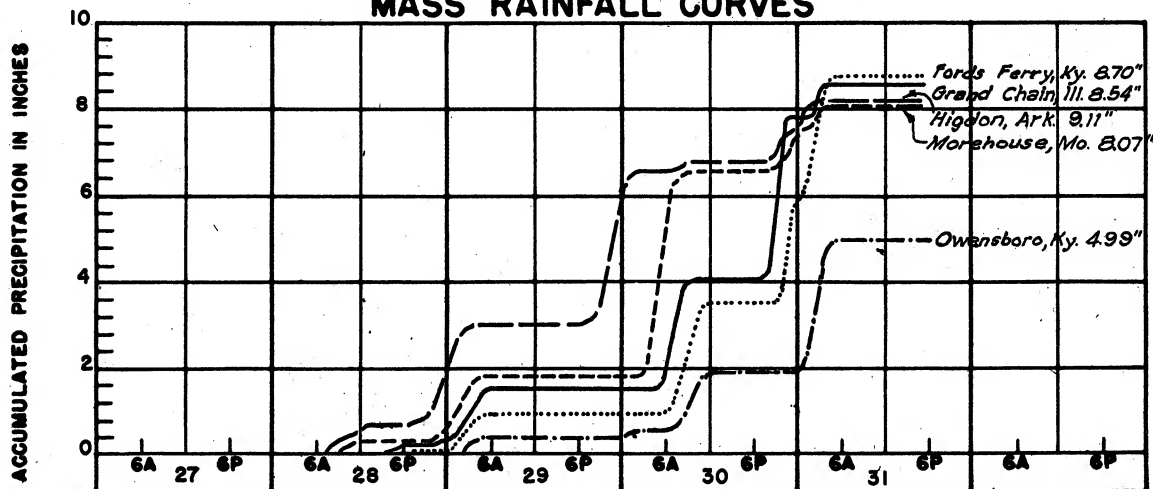
Final isohyetal maps, in 2 sheets, scale 1:1,000,000

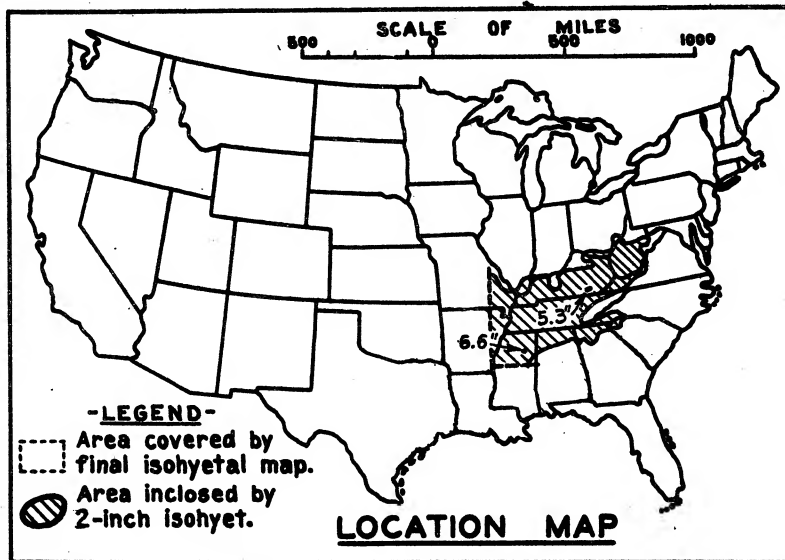
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 4
 Form S-11 (Depth-area data from isohyetal map)----- 2
 Form S-12 (Maximum depth-duration data)----- 15
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	5.2	5.4	6.9	7.8	7.9	7.9	7.9	8.6	8.7	8.7
100	4.1	5.0	5.6	7.4	7.5	7.5	7.5	8.2	8.3	8.3
200	3.8	4.8	5.1	7.1	7.3	7.3	7.3	8.0	8.2	8.2
500	3.3	4.3	4.6	6.5	6.7	6.7	6.7	7.7	7.9	7.9
1,000	2.9	3.9	4.1	6.0	6.3	6.3	6.3	7.4	7.6	7.6
2,000	2.5	3.4	3.6	5.3	5.8	5.8	5.8	7.0	7.2	7.2
5,000	2.0	2.7	3.0	4.3	4.9	4.9	4.9	6.2	6.5	6.5
10,000	1.6	2.2	2.4	3.5	4.0	4.0	4.2	5.5	5.8	5.9
20,000	1.1	1.7	1.9	2.5	2.8	2.9	3.3	4.5	4.9	5.0
25,000	0.9	1.6	1.7	2.0	2.3	2.5	3.0	4.1	4.5	4.6

STORM STUDIES - ISOHYETAL MAPStorm of March 28-31, 1938Assignment OR 5-8Study Prepared by: Louisville, Ky. District
Ohio River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of January 21-24, 1920
 Assignment OR 6-23
 Location W.Va., Ky., Tenn., and
 Study Prepared by: Miss.
 Ohio River Division
 Nashville District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/17/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/24/43

Remarks: Centers at :
 Pontotoc, Miss. and
 Williamsburg, Ky.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	19
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	32
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	77

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

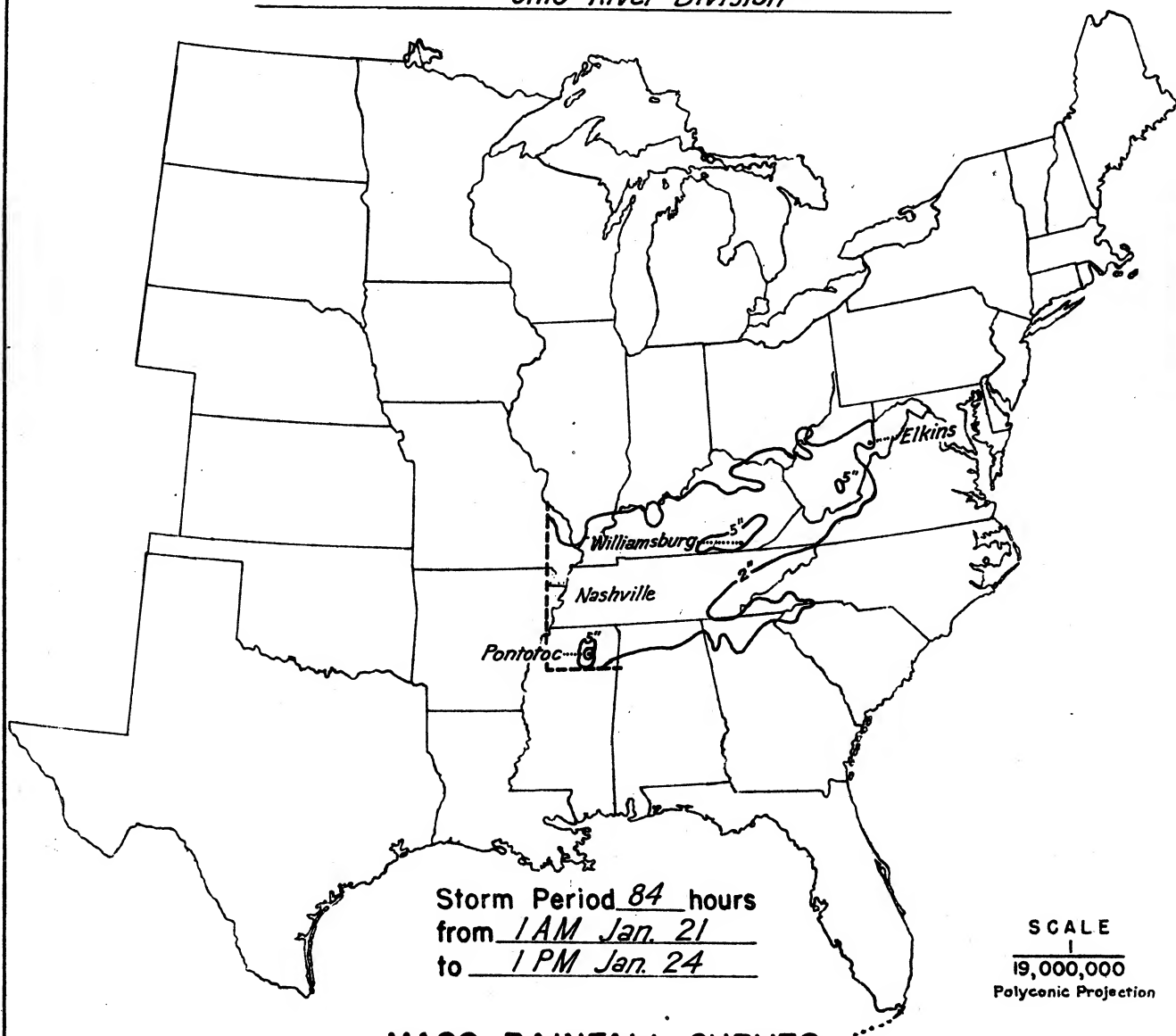
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	11
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	25
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

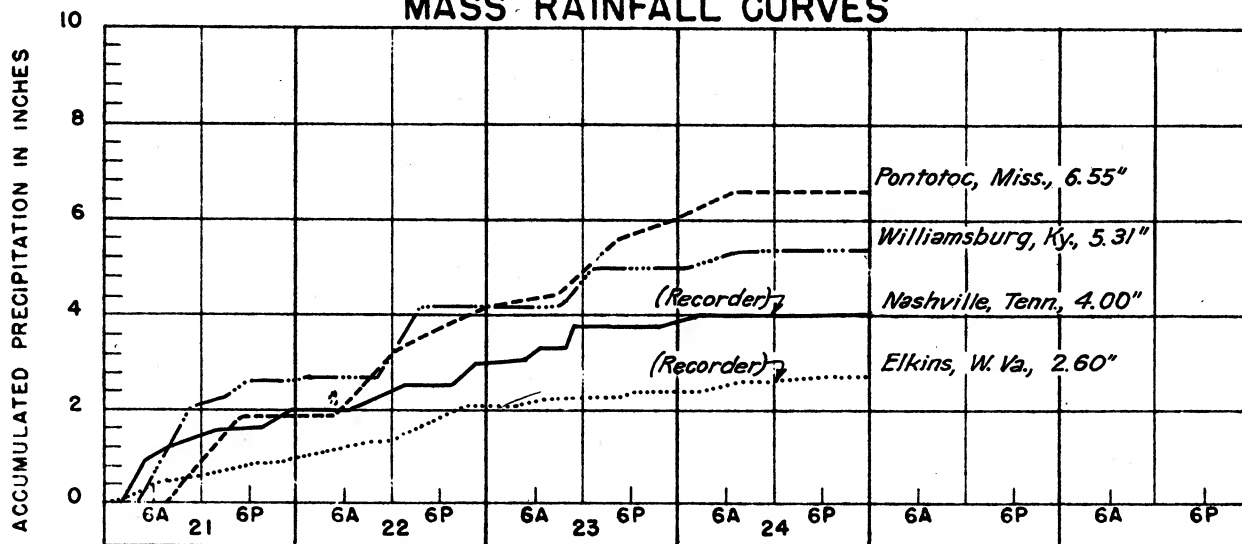
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

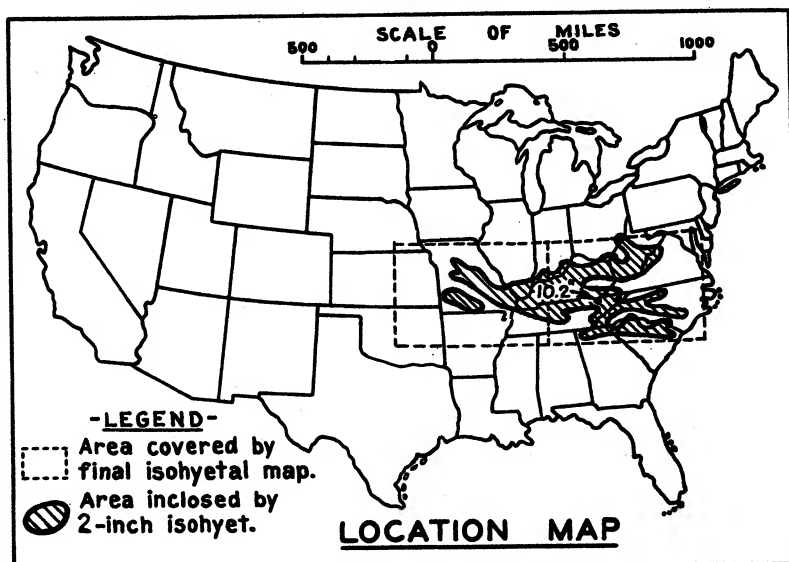
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	2.3	2.4	2.7	2.9	3.4	4.2	4.5	5.8	6.6	6.6
100	2.0	2.3	2.7	2.9	3.3	4.1	4.4	5.5	6.3	6.4
200	1.9	2.3	2.6	2.9	3.3	4.1	4.4	5.4	6.2	6.3
500	1.8	2.2	2.6	2.8	3.3	4.0	4.3	5.2	5.9	6.1
1,000	1.7	2.1	2.5	2.8	3.2	3.9	4.2	5.0	5.7	5.9
2,000	1.6	2.0	2.4	2.8	3.1	3.7	4.1	4.8	5.4	5.7
5,000	1.4	1.9	2.3	2.6	2.9	3.4	3.9	4.5	5.0	5.4
10,000	1.3	1.8	2.2	2.4	2.7	3.1	3.7	4.2	4.6	5.0
20,000	1.1	1.6	2.0	2.2	2.5	2.8	3.4	3.9	4.3	4.7
50,000	0.9	1.4	1.6	1.8	2.1	2.4	2.9	3.4	3.7	4.1
100,000	0.6	1.1	1.3	1.4	1.7	2.0	2.4	2.9	3.2	3.4

STORM STUDIES - ISOHYETAL MAP

Storm of January 21-24, 1920 Assignment OR 6-23Study Prepared by: Nashville, Tenn. District
Ohio River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 28-30, 1928

Assignment OR 7-10

Location Missouri-North Carolina

Study Prepared by:

Ohio River Division

Nashville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 1/9/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/24/43

Remarks: Centers at :

Clinton, Tenn., Seymour, Mo.,
and Princeton, Ky.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	21
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	37
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	72

PART II

Final isohyetal maps, in 2 sheets, scale 1:1,000,000

Data and computation sheets:

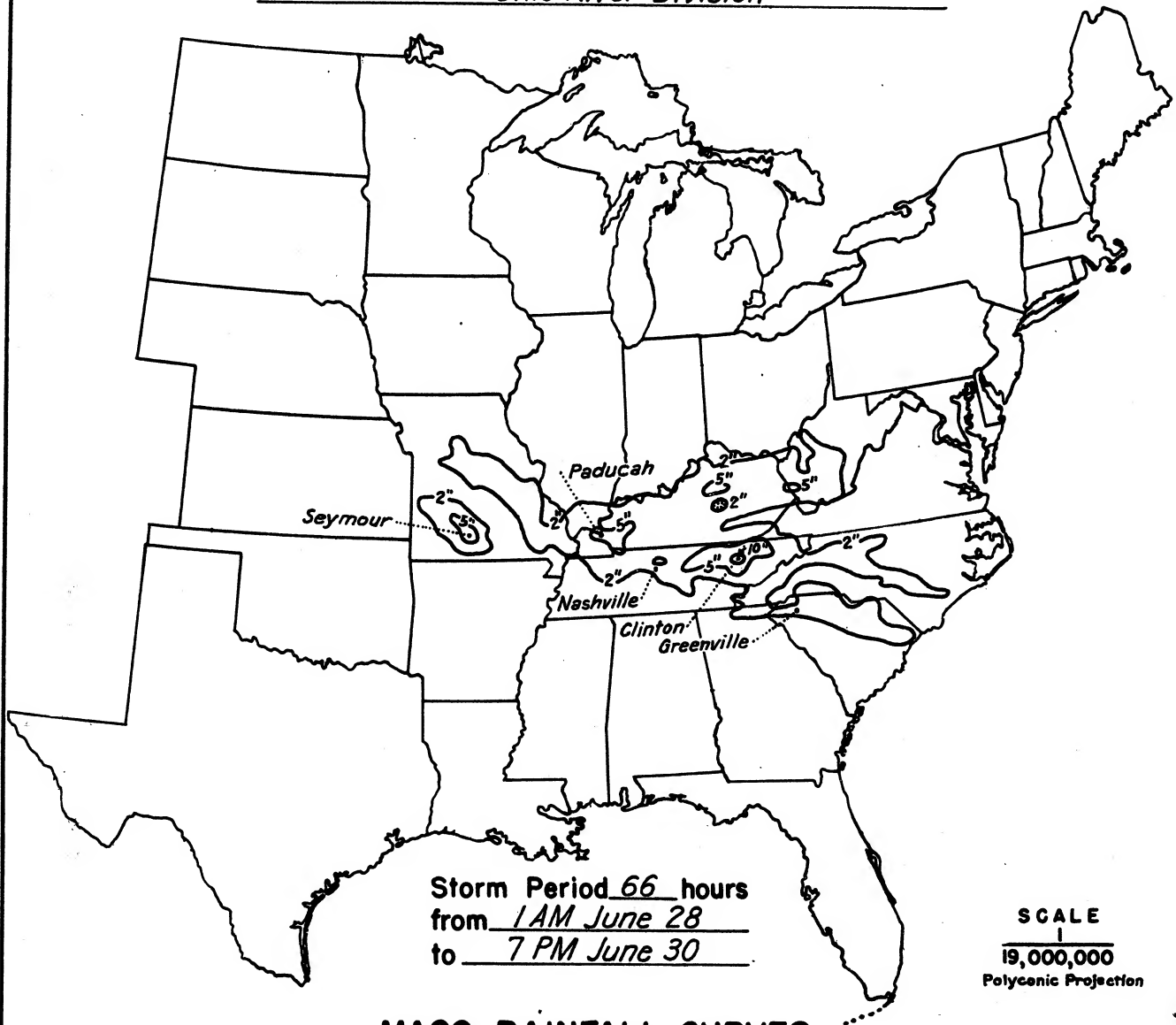
Form S-10 (Data from mass rainfall curves)-----	14
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	15
Maximum duration-depth-area curves-----	2
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

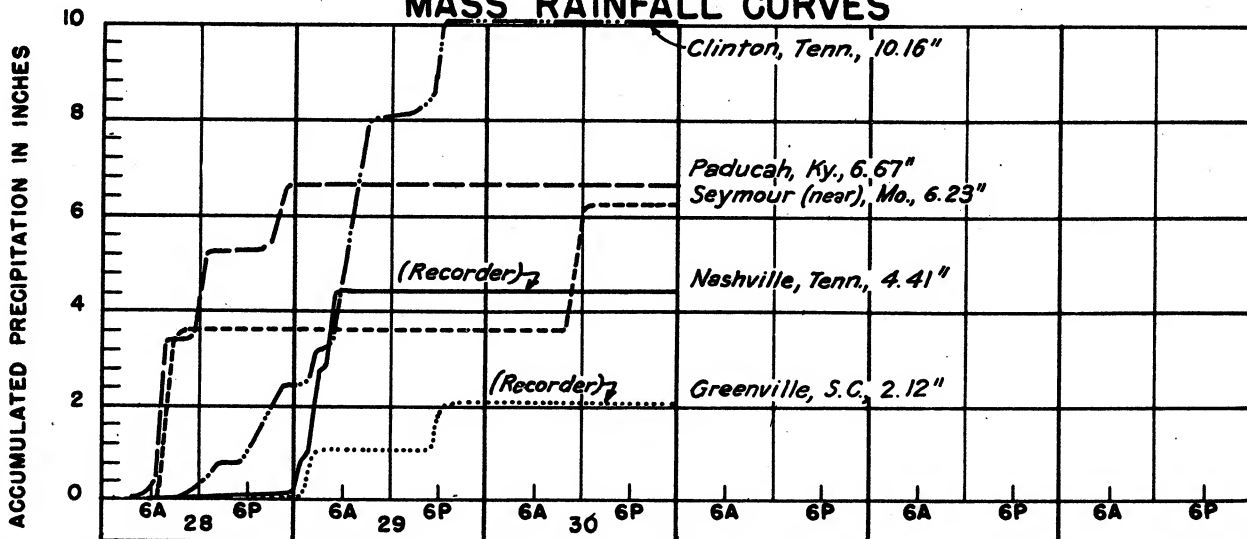
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	66	
10	4.8	6.4	7.6	8.9	9.8	10.2	10.2	10.2	10.2	
100	4.1	5.9	7.5	8.7	9.7	10.1	10.1	10.1	10.1	
200	3.8	5.6	7.4	8.6	9.6	9.9	10.0	10.0	10.0	
500	3.4	5.1	7.1	8.2	9.1	9.4	9.5	9.5	9.5	
1,000	3.1	4.7	6.7	7.7	8.5	8.7	8.8	8.8	8.8	
2,000	2.7	4.3	6.1	7.1	7.7	7.8	7.9	7.9	7.9	
5,000	2.3	3.6	5.1	6.1	6.5	6.7	6.9	6.9	6.9	
10,000	1.9	3.1	4.4	5.2	5.6	5.8	6.1	6.1	6.1	
20,000	1.5	2.6	3.6	4.3	4.6	4.9	5.3	5.3	5.3	
50,000	1.0	1.8	2.5	3.1	3.4	3.7	4.2	4.2	4.2	
70,000	0.8	1.6	2.1	2.6	2.9	3.2	3.8	3.8	3.8	

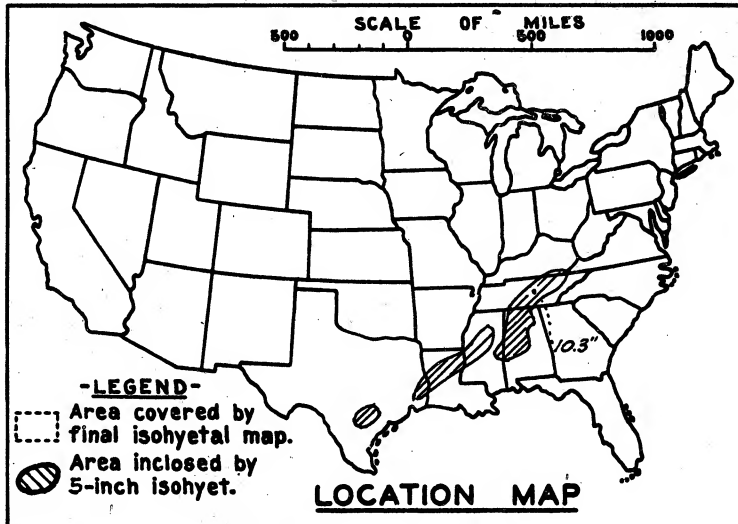
STORM STUDIES - ISOHYETAL MAP

Storm of June 28-30, 1928 Assignment OR 7-10
Study Prepared by: Nashville, Tenn. District
Ohio River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 21-23 March 1929

Assignment O R 7-15

Location Texas - Kentucky

Study Prepared by:

Ohio River Division

Nashville District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 4-19-40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12-5-45

Remarks:

Center at

Rock Island, Tenn.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	3
Form 5001-B (24-hour " ").....	34
Form 5001-D (" " " ").....	-
Miscl. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	46

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

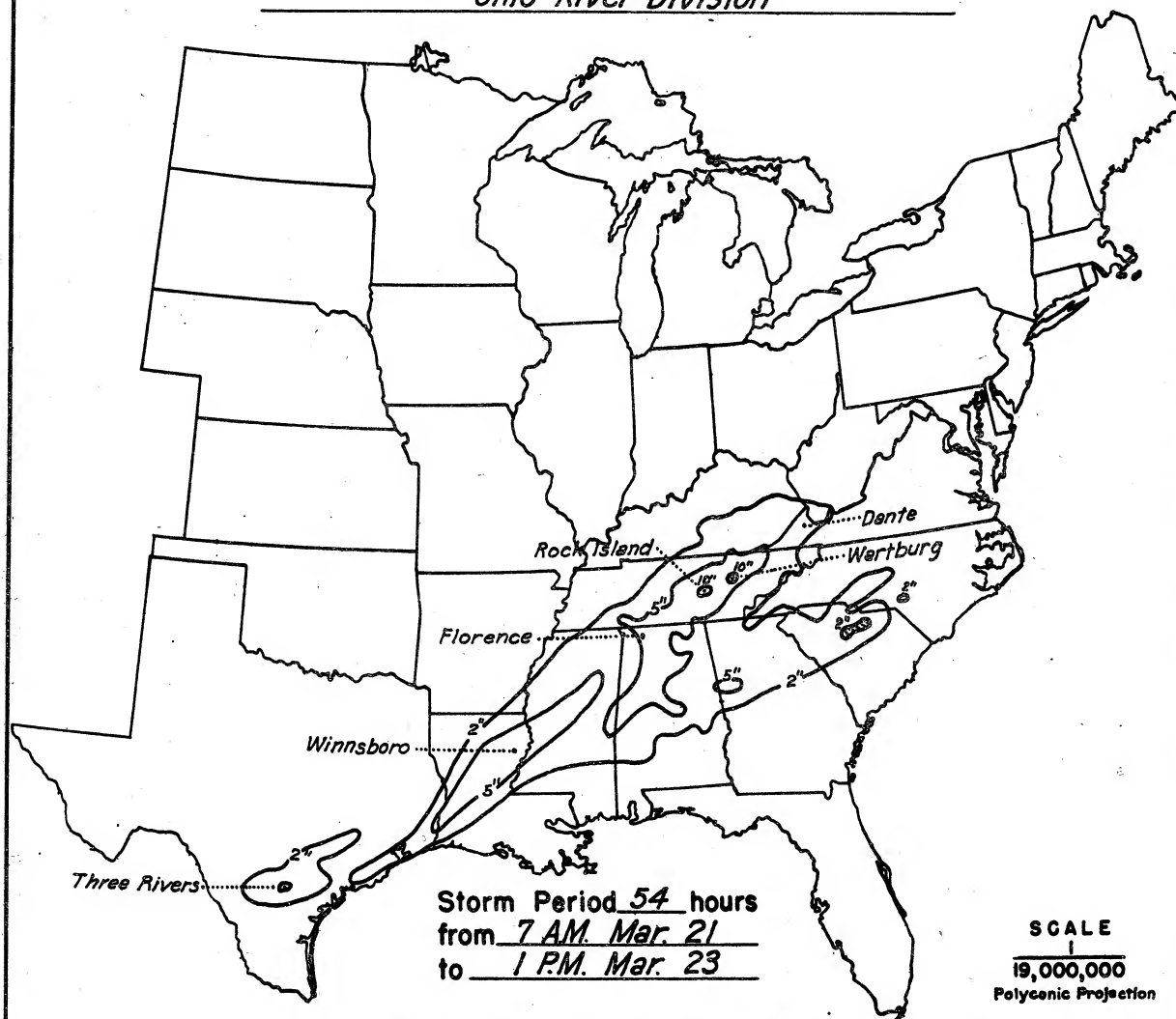
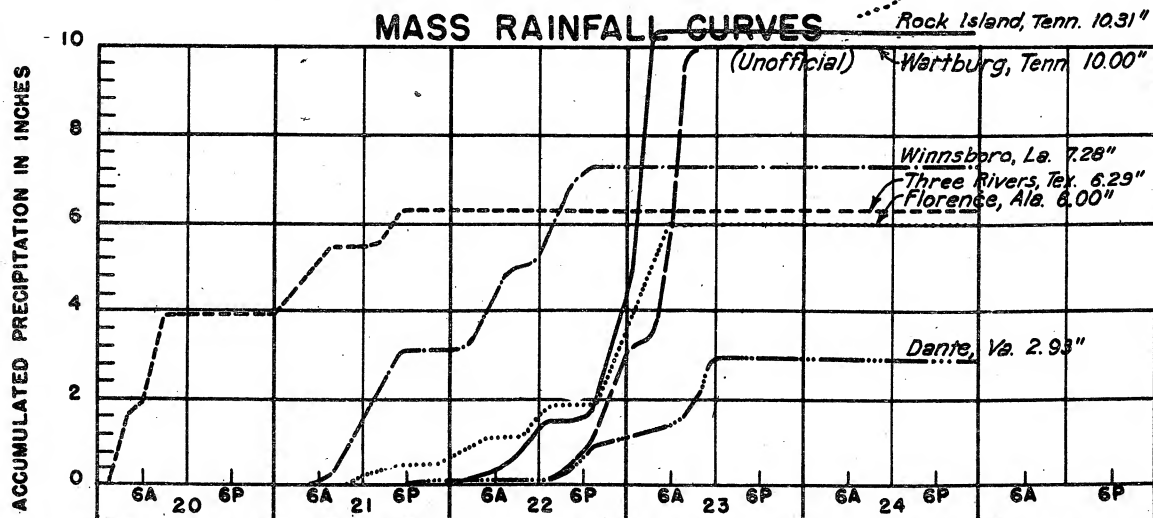
Form S-10 (Data from mass rainfall curves).....	9
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	8
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

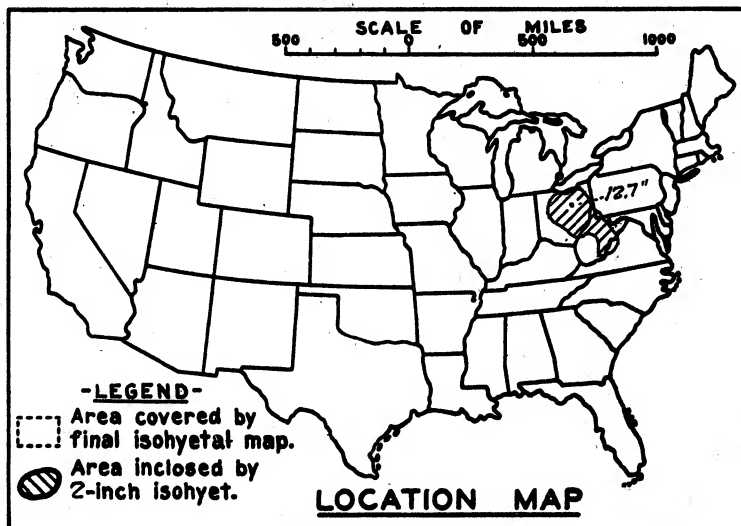
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	54			
10	7.2	8.8	9.2	10.1	10.3	10.3	10.3	10.3			
100	6.5	8.5	9.1	9.9	10.1	10.1	10.1	10.2			
200	6.2	8.4	9.0	9.7	9.9	9.9	10.0	10.1			
500	5.8	8.1	8.8	9.3	9.6	9.7	9.7	9.8			
1,000	5.4	7.7	8.5	8.9	9.2	9.3	9.4	9.5			
2,000	5.0	7.1	8.1	8.4	8.7	8.8	9.0	9.1			
5,000	4.3	6.2	7.2	7.5	7.8	7.9	8.1	8.3			
10,000	3.7	5.4	6.3	6.6	6.9	7.0	7.2	7.5			
20,000	3.1	4.4	5.3	5.6	5.9	6.0	6.3	6.7			
50,000	2.0	2.9	3.8	4.0	4.2	4.3	4.9	5.4			
65,000	1.7	2.5	3.3	3.5	3.7	3.8	4.5	4.9			

STORM STUDIES - ISOHYETAL MAP

Storm of March 21-23, 1929 Assignment OR 7-15
 Study Prepared by: Nashville, Tenn. District
Ohio River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 6-7 August 1935

Assignment O R 9 - 11

Location Ohio

Study Prepared by:

Ohio River Division

Pittsburgh District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 1/20/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/12/46

Remarks: Center near

Keene, Ohio

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	10
Form 5001-B (24-hour " ")-----	59
Form 5001-D (" " " ")-----	—
Misc. precip. records, meteorological data, etc.-----	—
Form 5002 (Mass rainfall curves)-----	59

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

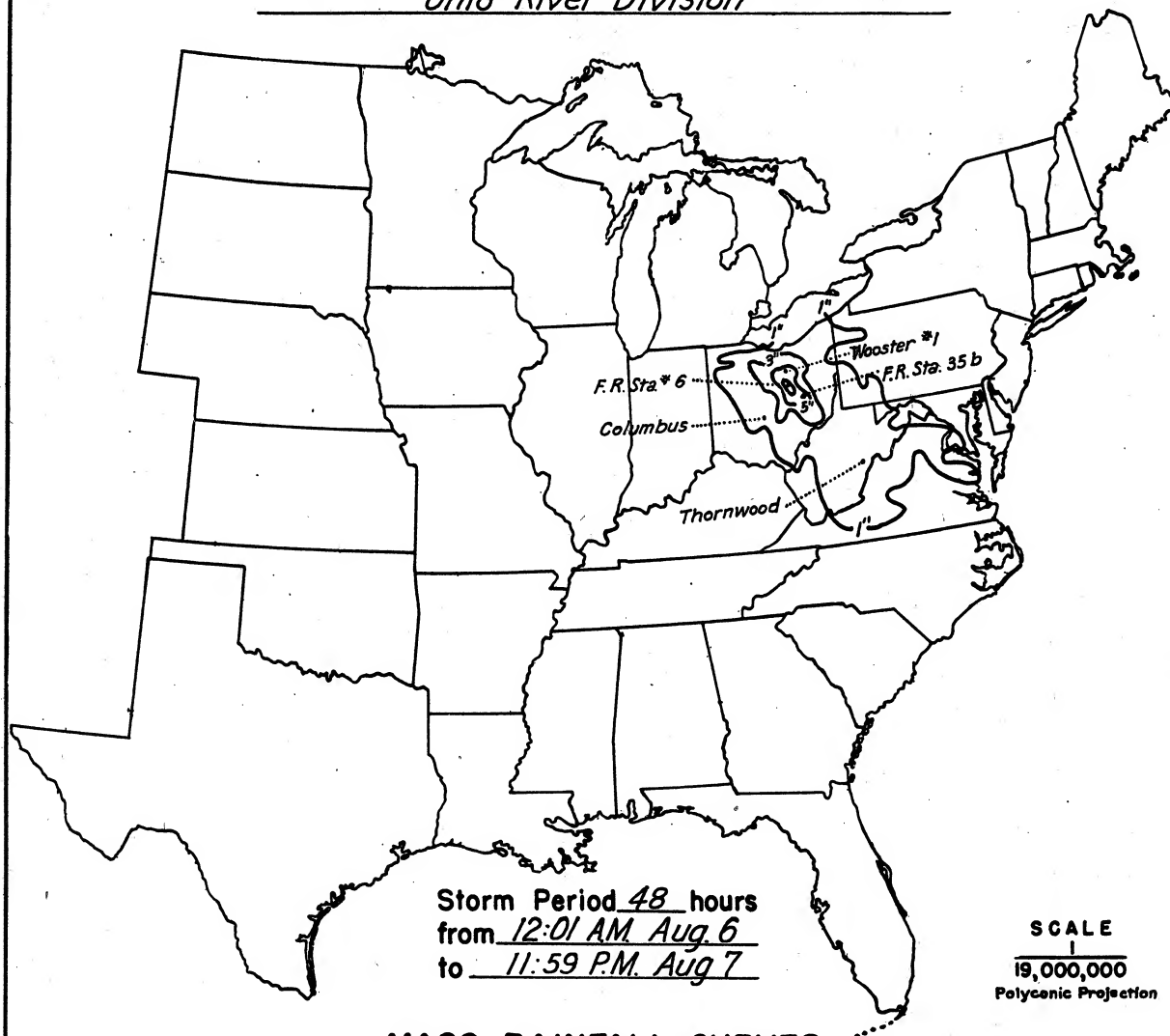
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	14
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

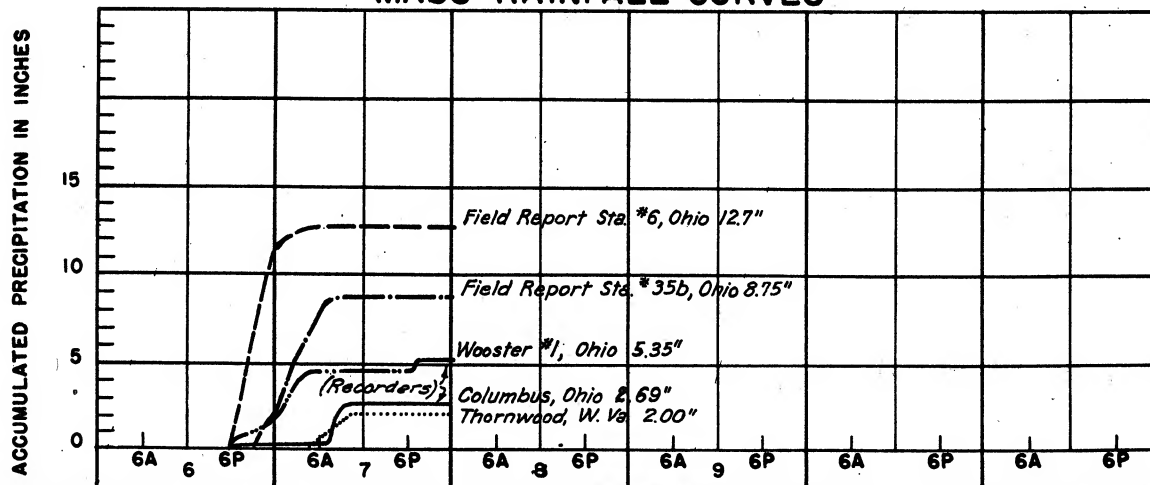
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
Max. Station	11.3	12.7	12.7	12.7	12.7	12.7	12.7					
10	9.6	11.6	11.7	11.8	11.8	11.8	11.8					
100	7.6	10.2	10.3	10.4	10.4	10.4	10.4					
200	7.0	9.6	9.8	9.9	9.9	9.9	9.9					
500	6.1	8.7	9.0	9.1	9.1	9.1	9.1					
1,000	5.4	7.8	8.0	8.1	8.1	8.1	8.1					
2,000	4.6	6.7	7.0	7.1	7.1	7.1	7.1					
5,000	3.6	5.2	5.6	5.7	5.7	5.7	5.7					
10,000	2.8	4.0	4.5	4.6	4.6	4.6	4.6					
19,300	2.1	2.9	3.4	3.5	3.5	3.5	3.5					

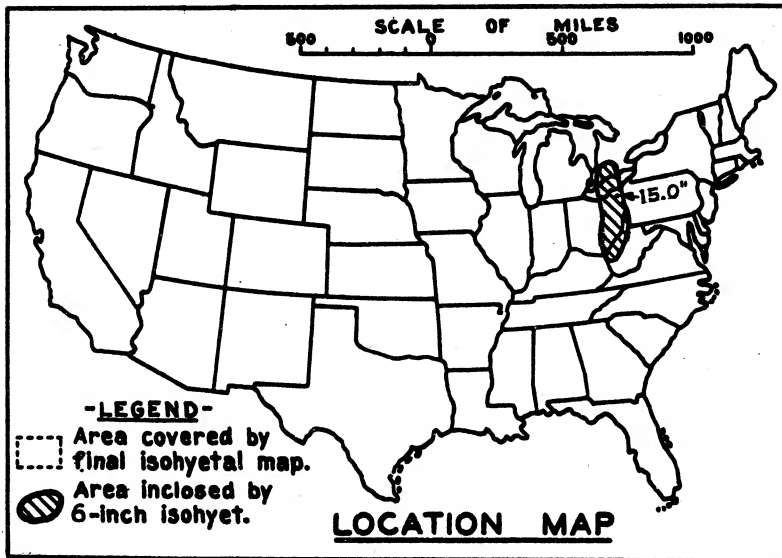
STORM STUDIES - ISOHYETAL MAP

Storm of August 6-7, 1935 Assignment OR 9-11
 Study Prepared by: Pittsburgh, Penna. District
Ohio River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 10 - 13, 1878
 Assignment O R 9 - 19
 Location Ohio, Pa. and W. Va.
 Study Prepared by:
 Ohio River Division
 Pittsburgh District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/18/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/16/42
 Remarks: Center at
 Jefferson, Ohio

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 5 sheet, scale vary

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	-
Form 5001-B (24-hour " ").....	26
Form 5001-D (" " " ").....	7
Misc. precip. records, meteorological data, etc.....	42
Form 5002 (Mass rainfall curves).....	33

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

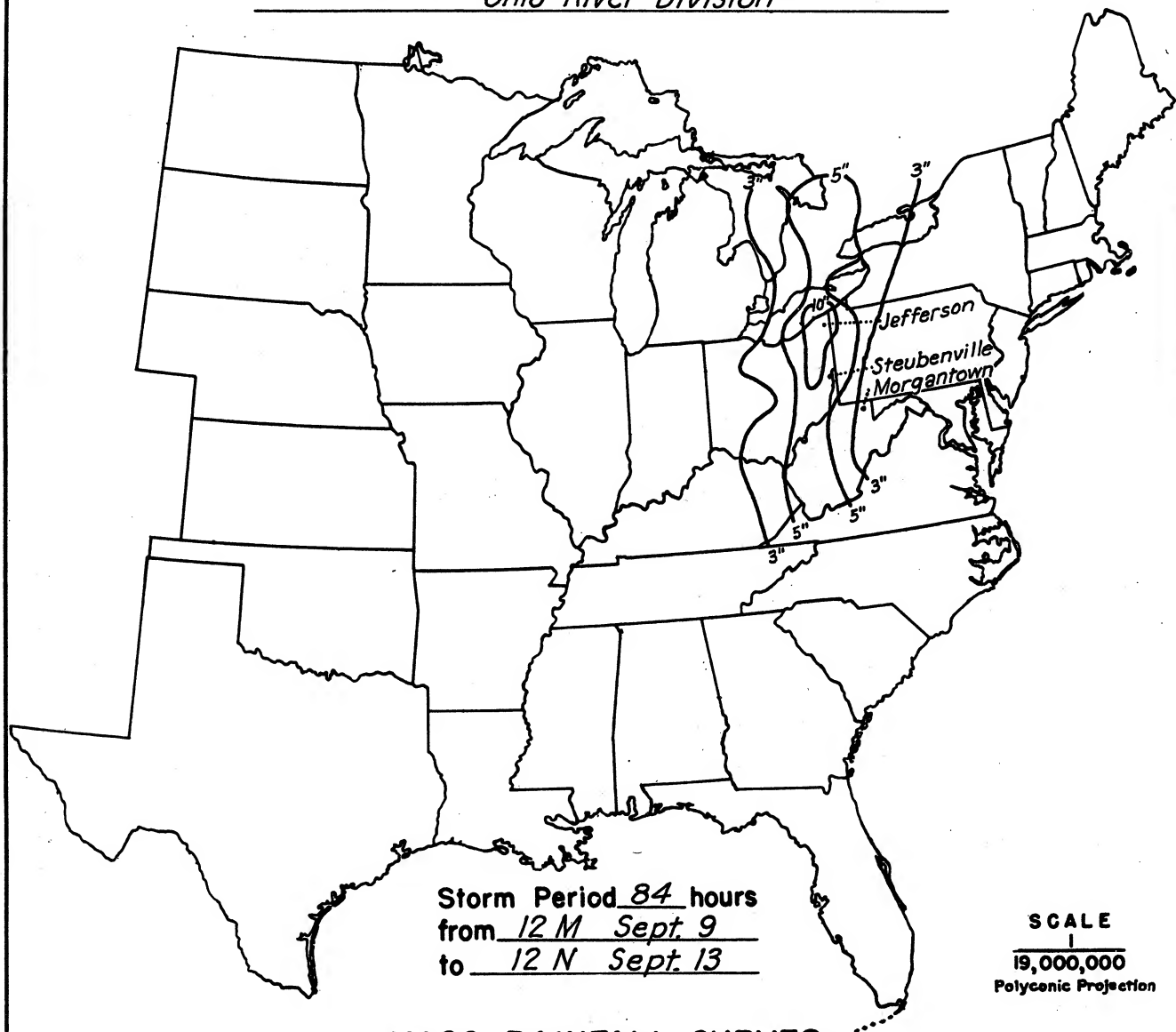
Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	7
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

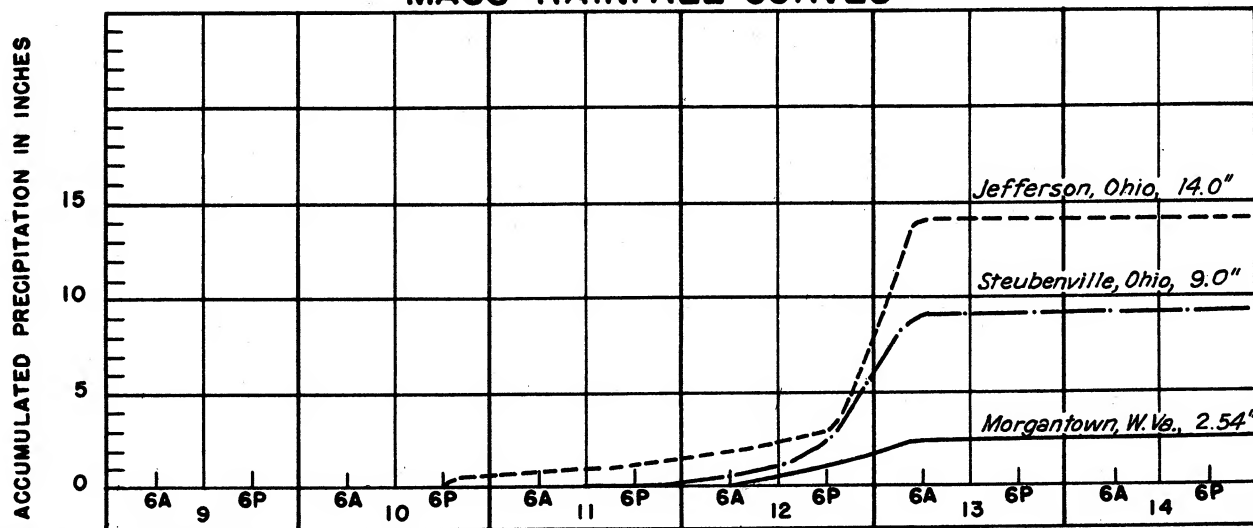
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	66	84
10*	5.9	11.2	11.7	12.2	13.0	13.4	14.3	14.9	15.0	*15.0
100	5.8	10.9	11.6	12.1	12.7	13.2	14.1	14.6	14.7	14.7
200	5.8	10.8	11.4	11.9	12.5	12.9	13.9	14.4	14.5	14.5
500	5.6	10.5	11.1	11.5	12.2	12.6	13.4	13.9	14.0	14.0
1,000	5.3	10.1	10.6	11.0	11.7	12.1	12.9	13.4	13.5	13.5
2,000	4.9	9.4	10.0	10.4	11.1	11.5	12.2	12.6	12.7	12.7
5,000	4.1	8.0	8.8	9.2	9.9	10.3	10.9	11.3	11.3	11.3
10,000	3.5	6.8	7.5	8.1	8.8	9.0	9.7	9.9	10.0	10.0
20,000	2.8	5.4	6.1	6.7	7.2	7.5	8.1	8.4	8.4	8.4
50,000	1.9	3.5	4.1	4.6	4.9	5.2	5.8	6.1	6.1	6.1
70,000	1.6	2.8	3.4	3.8	4.0	4.3	4.9	5.1	5.2	5.2
90,000	1.3	2.2	2.9	3.2	3.4	3.7	4.1	4.4	4.5	4.5

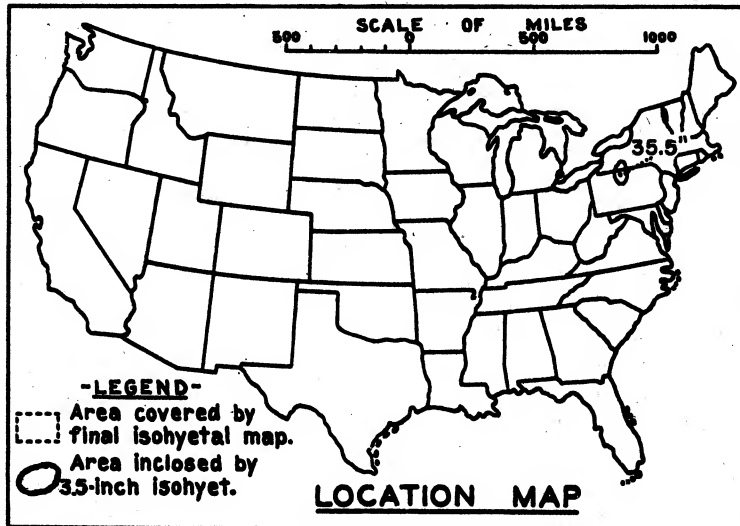
* Extrapolated

STORM STUDIES - ISOHYETAL MAP

Storm of September 10-13, 1878 Assignment OR 9-19Study Prepared by: Pittsburgh, Penna. District
Ohio River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 17-18 July 1942
 Assignment OR 9-23
 Location Penna. - N.Y.
 Study Prepared by:
 Ohio River Division
 Pittsburgh District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/30/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/10/47
 Remarks: Center near
 Port Alleghany, Penna.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:62,500

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	58
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	24
Misc. precip. records, meteorological data, etc.-----	465
Form 5002 (Mass rainfall curves)-----	54

PART II

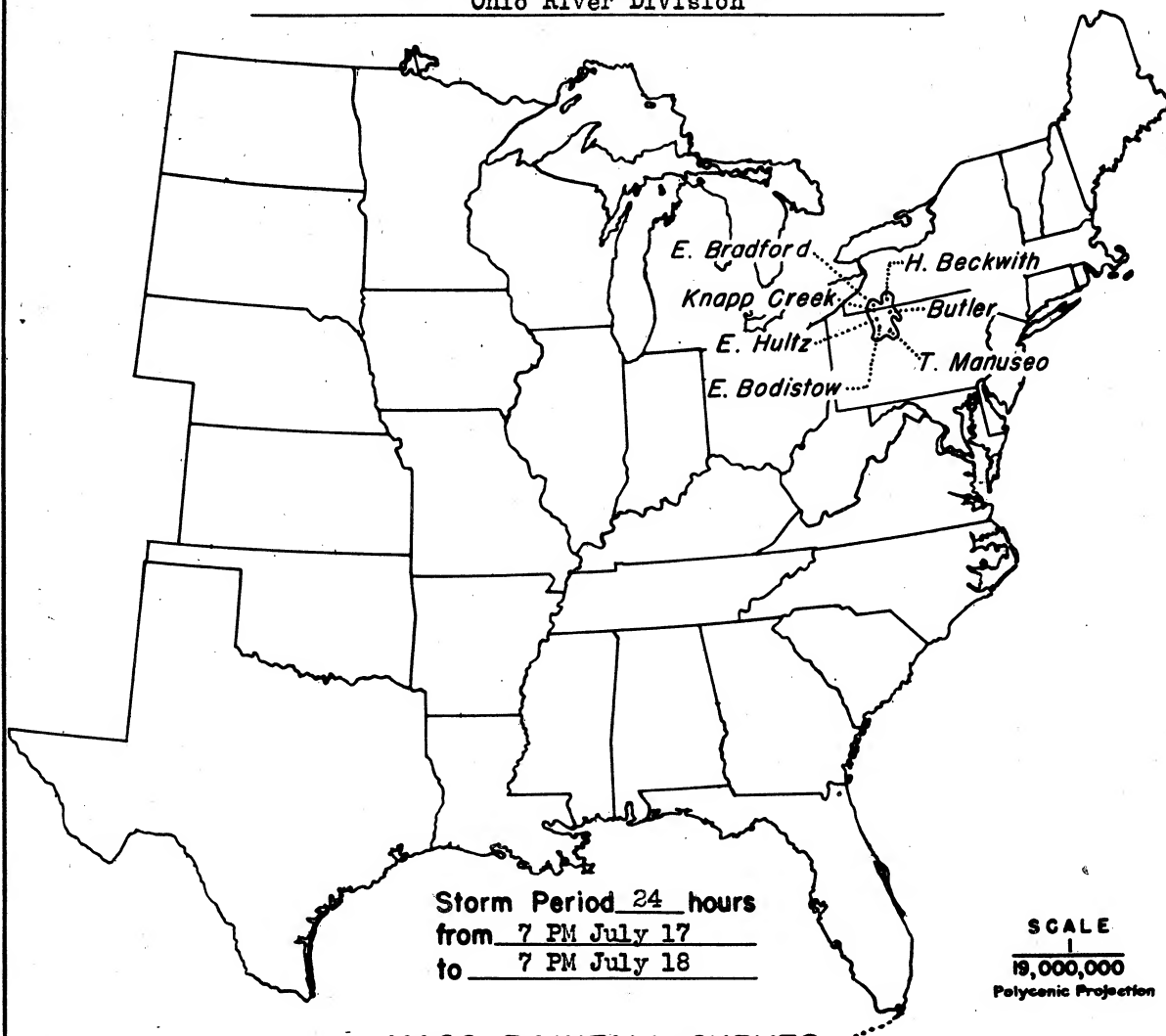
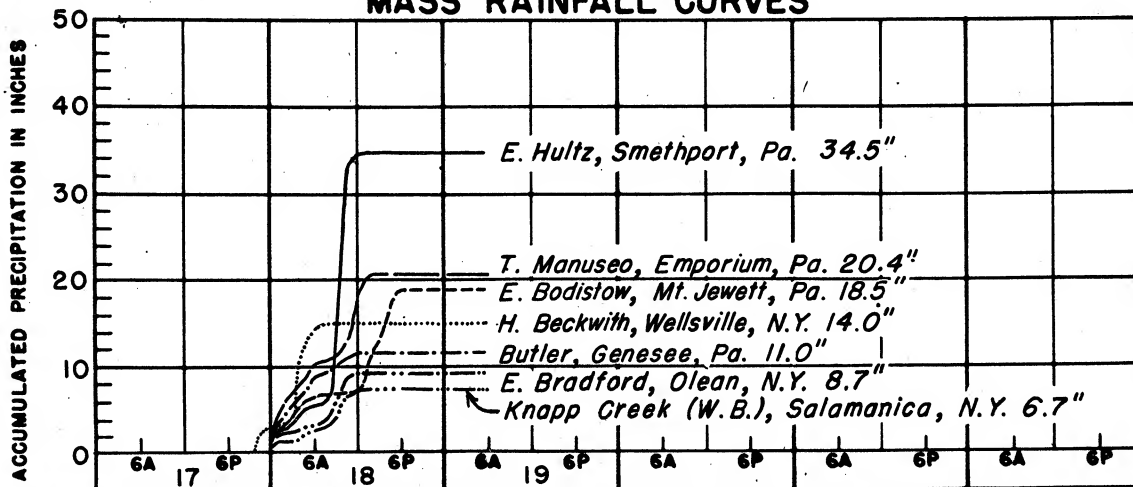
Final isohyetal maps, in 1 sheet, scale 1:250,000

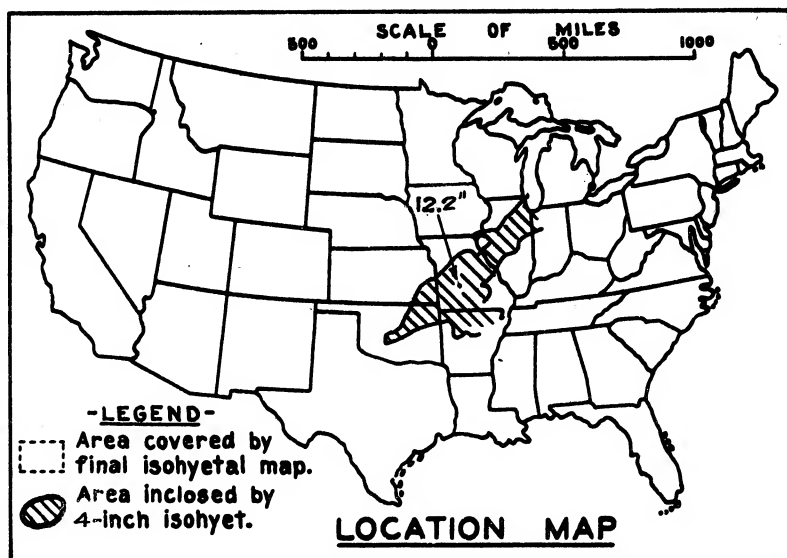
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	6
Form S-11 (Depth-area data from isohyetal map)-----	6
Form S-12 (Maximum depth-duration data)-----	55
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	-

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24						
Max. Station	30.7	34.3	35.5	35.5						
1	29.3	32.0	33.8	34.2						
5	26.4	28.6	30.5	31.0						
10	24.7	26.7	28.7	29.2						
20	22.8	24.8	26.8	27.4						
50	19.7	21.9	24.1	24.6						
100	16.4	19.4	21.8	22.4						
200	13.1	16.8	19.3	19.9						
500	9.1	13.2	15.7	16.3						
1,000	6.4	10.3	12.6	13.3						
2,000	3.9	7.2	9.2	10.2						
4,300	2.5	4.6	6.1	7.1						

STORM STUDIES - ISOHYETAL MAPStorm of July 17-18, 1942Assignment OR 9-23Study Prepared by: Pittsburgh, Pa. District
Ohio River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of December 16-20, 1895

Assignment M R 1 - 1

Location Ill. Mo. Okla.

Study Prepared by:

Missouri River Division
Kansas City District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 8/31/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/8/45

Remarks: Center at:

Phillipsburg, Missouri

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale. 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	19
Form 5001-B (24-hour " ")-----	39
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	11
Form 5002 (Mass rainfall curves)-----	37

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	15
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

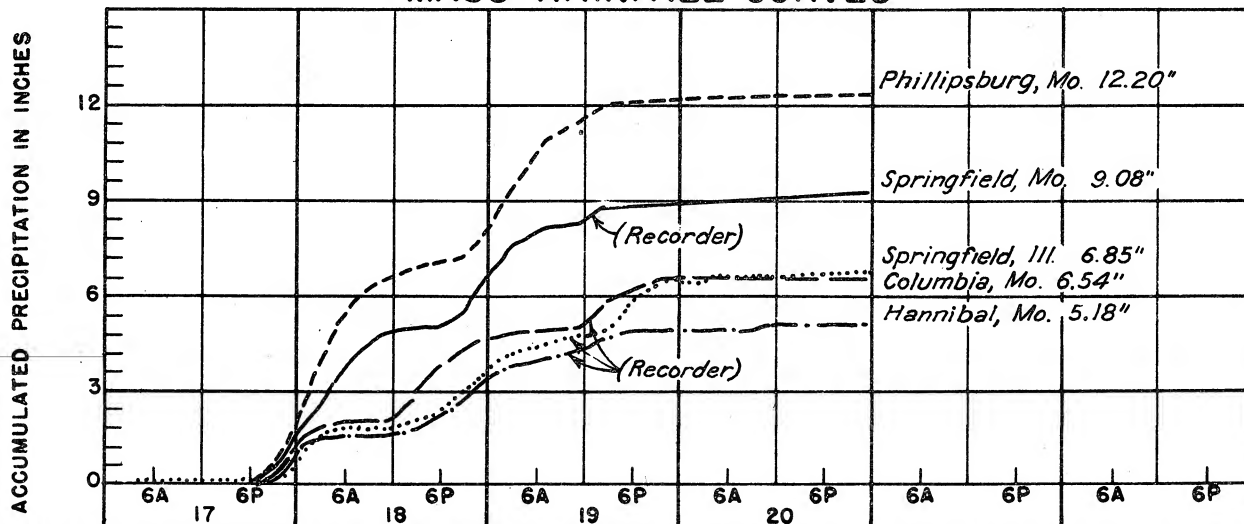
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	4.3	6.9	7.5	7.6	9.0	10.6	12.0	12.1	12.2	12.2
100	3.8	6.0	7.0	7.2	8.4	10.1	11.6	11.7	11.8	11.8
200	3.7	5.7	6.8	7.0	8.2	9.9	11.4	11.6	11.7	11.7
500	3.5	5.3	6.5	6.7	7.9	9.7	11.1	11.3	11.4	11.4
1,000	3.3	5.0	6.3	6.5	7.7	9.4	10.8	11.0	11.1	11.1
2,000	3.1	4.7	5.9	6.2	7.4	9.0	10.3	10.6	10.7	10.7
5,000	2.8	4.2	5.3	5.7	6.8	8.3	9.5	9.8	10.1	10.1
10,000	2.5	3.8	4.7	5.2	6.3	7.6	8.7	9.1	9.3	9.3
20,000	1.9	3.1	3.8	4.5	5.6	6.6	7.7	8.2	8.4	8.4
50,000	1.3	2.1	2.7	3.3	4.2	5.1	6.2	6.7	7.1	7.1
100,000	0.9	1.6	2.0	2.6	3.2	3.9	5.0	5.5	5.7	5.8
110,000	0.8	1.5	1.9	2.5	3.0	3.7	4.8	5.3	5.5	5.6

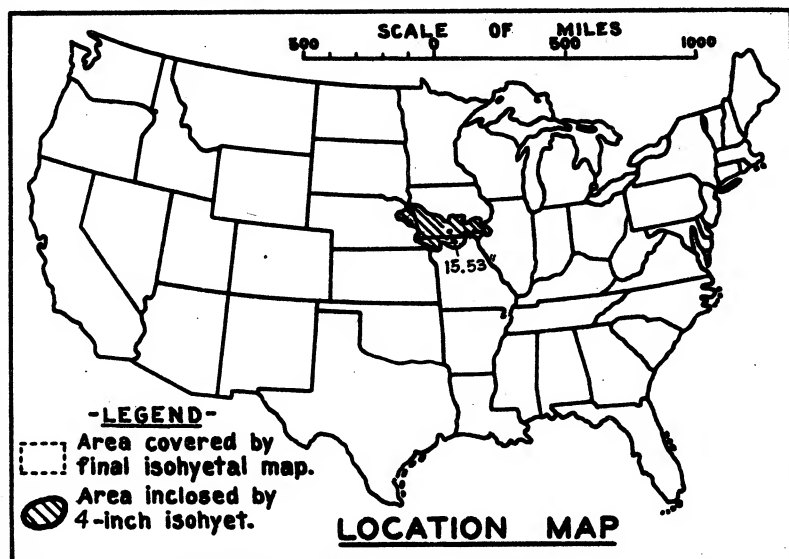
STORM STUDIES - ISOHYETAL MAP

Storm of December 16-20, 1895 Assignment MR 1-1
Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 24 - 28, 1903
 Assignment MR 1 - 10
 Location Iowa
 Study Prepared by:
 Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/6/39
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 11/4/44
 Remarks: Centers at
 Woodburn, Ia., and
 Council Bluffs, Ia.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	5
Form 5001-B (24-hour " ")-----	21
Form 5001-D (" " " ")-----	-
Miscl. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	11

PART II

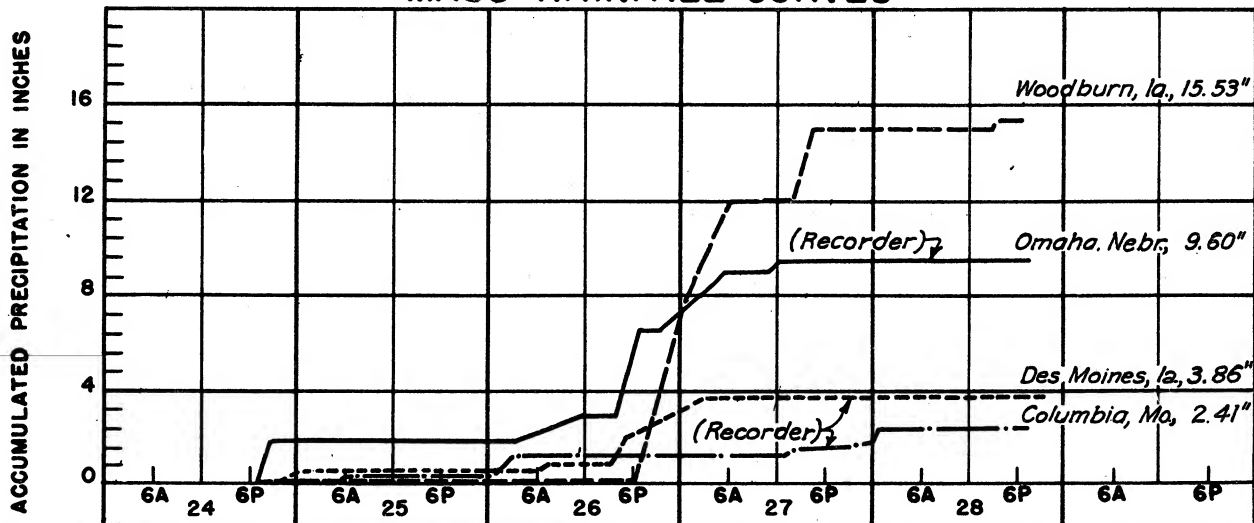
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

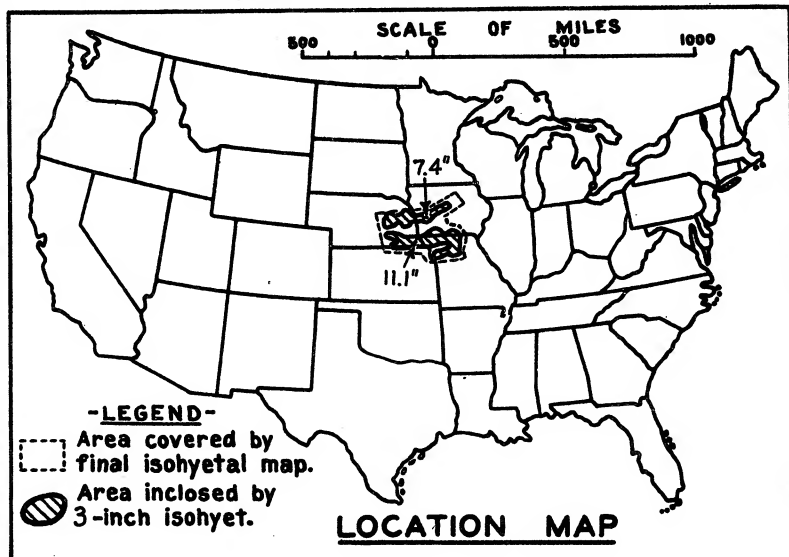
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	6.9	11.5	11.9	14.7	14.7	14.7	15.4	15.5	15.5	15.5
100	6.6	10.3	11.4	12.8	13.8	13.8	13.9	14.4	14.6	14.6
200	6.3	9.9	11.0	12.2	13.2	13.2	13.2	13.8	13.9	13.9
500	5.7	9.3	10.3	11.2	12.2	12.2	12.2	12.6	12.8	12.8
1,000	5.2	8.7	9.5	10.3	11.1	11.2	11.2	11.5	11.7	11.7
2,000	4.6	7.8	8.6	9.2	10.0	10.1	10.2	10.4	10.6	10.7
5,000	3.7	6.4	7.3	7.7	8.4	8.7	8.8	8.8	9.0	9.2
10,000	3.0	5.2	6.3	6.5	7.1	7.3	7.5	7.5	7.7	7.9
20,000	2.3	4.0	5.0	5.2	5.6	5.9	6.1	6.1	6.3	6.5
50,000	1.3	2.4	3.1	3.2	3.5	4.0	4.2	4.3	4.4	4.7
59,000	1.1	2.1	2.8	2.9	3.2	3.6	3.9	4.0	4.1	4.4

STORM STUDIES - ISOHYETAL MAPStorm of August 24-28, 1903 Assignment MR 1-10Study Prepared by: Kansas City, Mo. DistrictMissouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 13-16, 1907
 Assignment MR 1-23
 Location Iowa, Nebr. & Mo.
 Study Prepared by:
 Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/7/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 6/20/44

Remarks: Centers at
 Nemaha, Nebr., and
 Elliott, Iowa.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	14
Form 5001-B (24-hour " ")-----	10
Form 5001-D (" " " ")-----	11
Miscl. precip. records, meteorological data, etc.-----	5
Form 5002 (Mass rainfall curves)-----	29

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

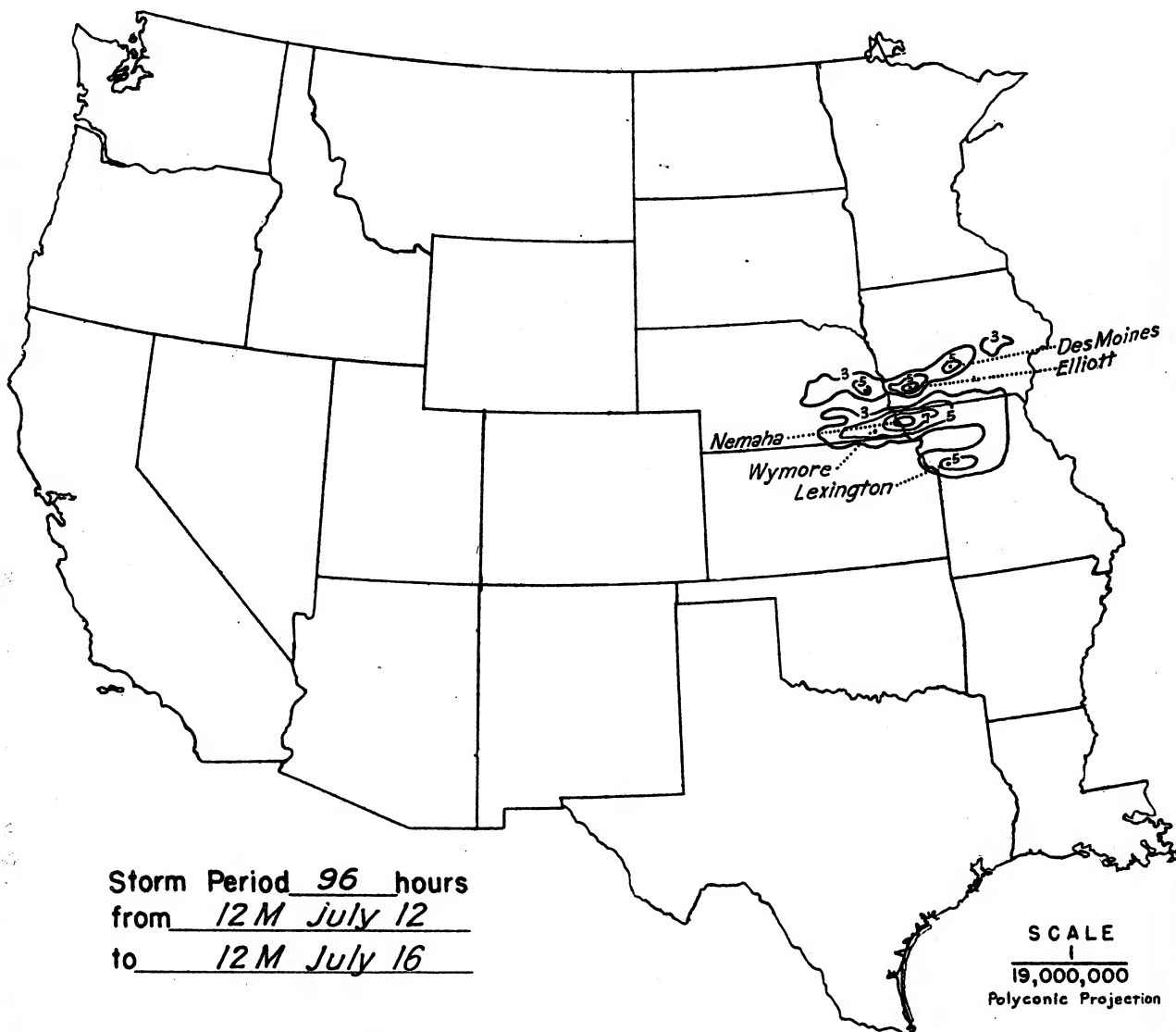
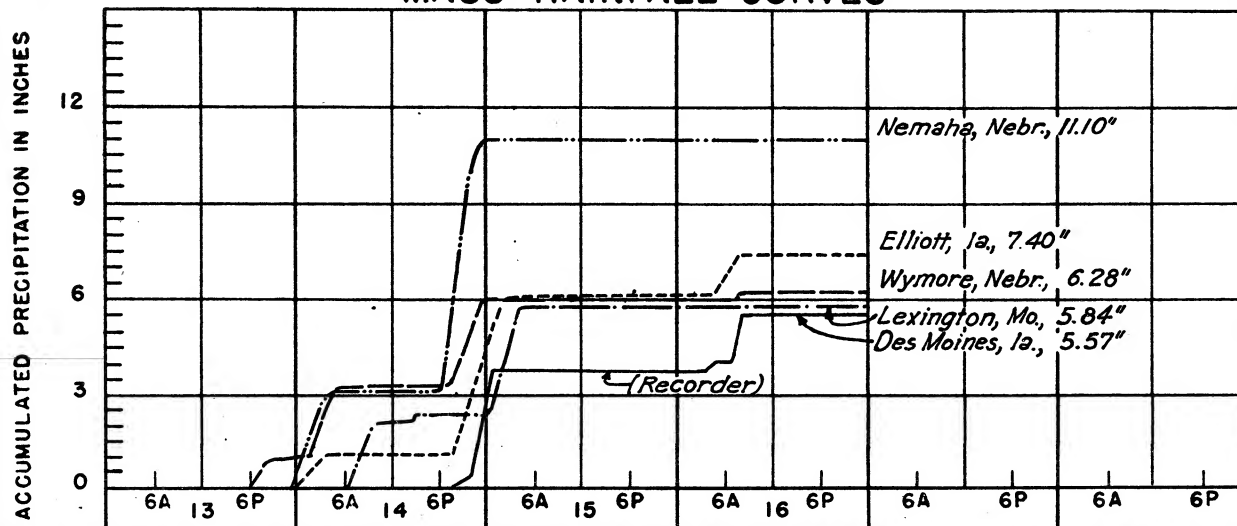
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	15
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

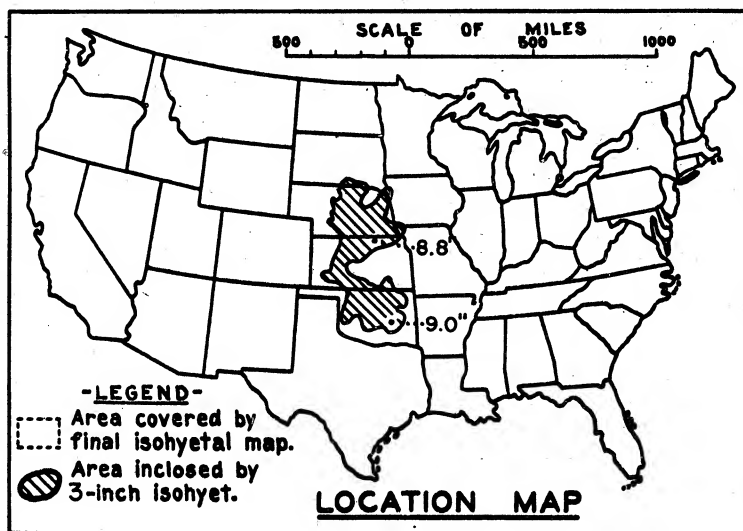
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	7.8	8.0	8.0	10.8	10.9	10.9	11.1	11.1	11.1	11.1
100	6.8	7.2	7.3	10.0	10.3	10.3	10.4	10.6	10.6	10.6
200	6.5	6.9	7.1	9.6	9.9	9.9	10.0	10.1	10.1	10.2
500	6.1	6.5	6.8	8.7	9.2	9.2	9.2	9.4	9.4	9.5
1,000	5.8	6.2	6.5	7.9	8.3	8.3	8.4	8.6	8.6	8.7
2,000	5.2	5.7	6.0	6.9	7.2	7.2	7.4	7.5	7.5	7.7
5,000	4.0	4.7	4.9	5.4	5.7	5.8	5.9	6.0	6.1	6.2
10,000	2.6	3.7	3.9	4.3	4.6	4.8	4.9	5.0	5.1	5.2
20,000	1.8	2.6	2.7	3.1	3.7	3.8	4.0	4.1	4.3	4.4
40,000	1.4	2.0	2.2	2.3	2.8	3.0	3.1	3.5	3.7	3.8

STORM STUDIES - ISOHYETAL MAP

Storm of July 13-16, 1907 Assignment MR 1-23
Study Prepared by: Kansas City, Mo. District
Missouri River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 4 - 10 June 1908

Assignment MR 1 - 24

Location Okla., Kans., & Nebr.

Study Prepared by:

Missouri River Division

Kansas City District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 30 Mar. 1945Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2 Dec. 1946Remarks: Centers at
Shawnee, Okla., and Frankford,
Kans.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	59
Form 5001-B (24-hour " ")-----	52
Form 5001-D (" " " ")-----	—
Misc. precip. records, meteorological data, etc.-----	18
Form 5002 (Mass rainfall curves)-----	49

PART II

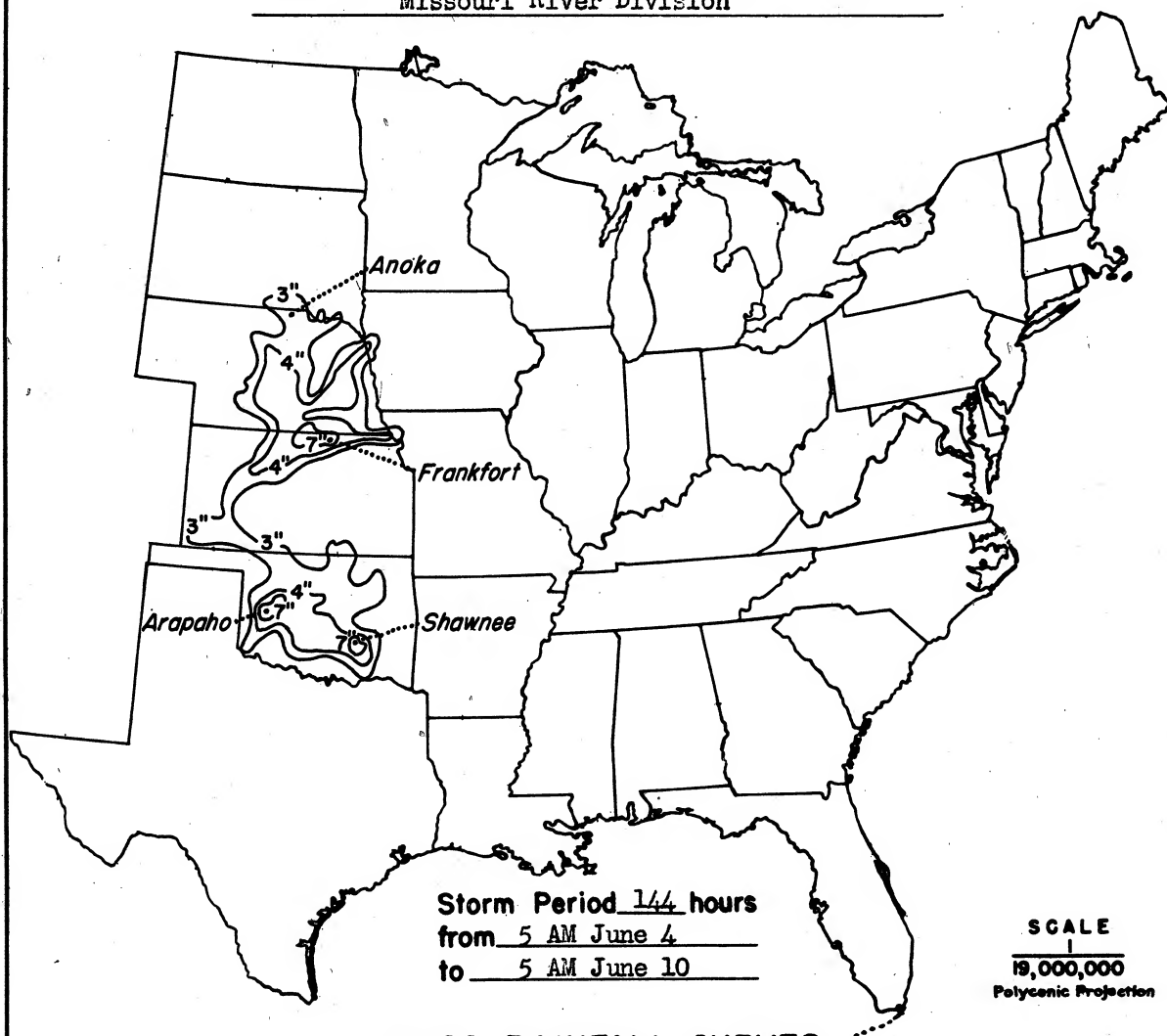
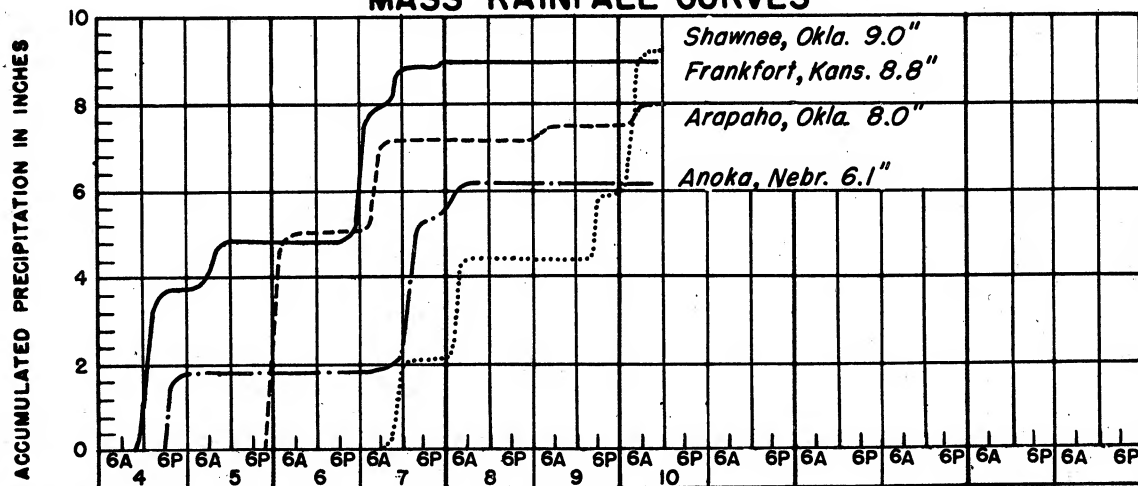
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

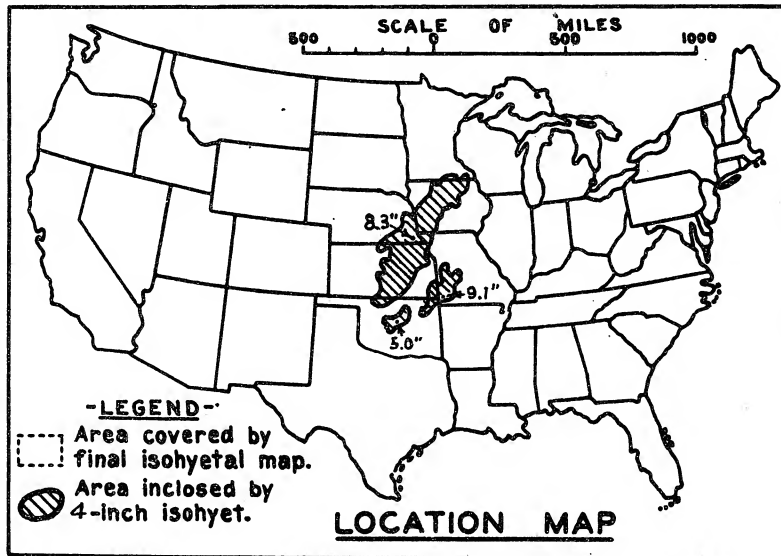
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	7
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	13
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	60	72	96	120	144
10	4.9	5.1	5.1	5.1	7.1	7.1	7.1	9.0	9.0	9.0	9.0
100	4.5	4.8	4.8	4.8	6.6	6.7	6.7	8.8	8.8	8.8	8.8
200	4.3	4.7	4.7	4.7	6.4	6.5	6.5	8.6	8.6	8.6	8.6
500	4.0	4.3	4.5	4.5	6.1	6.2	6.3	8.2	8.3	8.3	8.3
1,000	3.5	4.0	4.2	4.3	5.7	5.9	6.1	7.6	7.9	7.9	7.9
2,000	3.1	3.6	3.9	4.1	5.1	5.4	5.9	7.0	7.4	7.4	7.5
5,000	2.4	3.0	3.3	3.6	4.2	4.6	5.4	6.1	6.7	6.7	6.8
10,000	2.0	2.5	2.8	3.0	3.5	3.9	4.8	5.3	5.8	5.9	6.1
20,000	1.5	1.9	2.3	2.4	2.7	3.1	4.1	4.5	5.0	5.1	5.3
50,000	0.8	1.3	1.6	1.8	2.1	2.3	3.1	3.6	4.0	4.4	4.8
100,000	0.5	1.0	1.2	1.3	1.6	2.0	2.5	2.9	3.3	3.7	4.0

STORM STUDIES - ISOHYETAL MAPStorm of June 4-10, 1908Assignment MR 1-24Study Prepared by: Kansas City, Mo. District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of November 10-16, 1909
 Assignment M R 1 - 29
 Location Ia., Kans., Mo., Nebr.,
 Study Prepared by: Okla.

Missouri River Division
 Kansas City District

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6-19-44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9-26-45

Remarks: Centers at
 Neosho, Mo., DuBois, Nebr.,
 & Osage City, Kansas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	18
Form 5001-B (24-hour " ")-----	2
Form 5001-D (" " " ")-----	14
Misc. precip. records, meteorological data, etc.-----	9
Form 5002 (Mass rainfall curves)-----	40

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

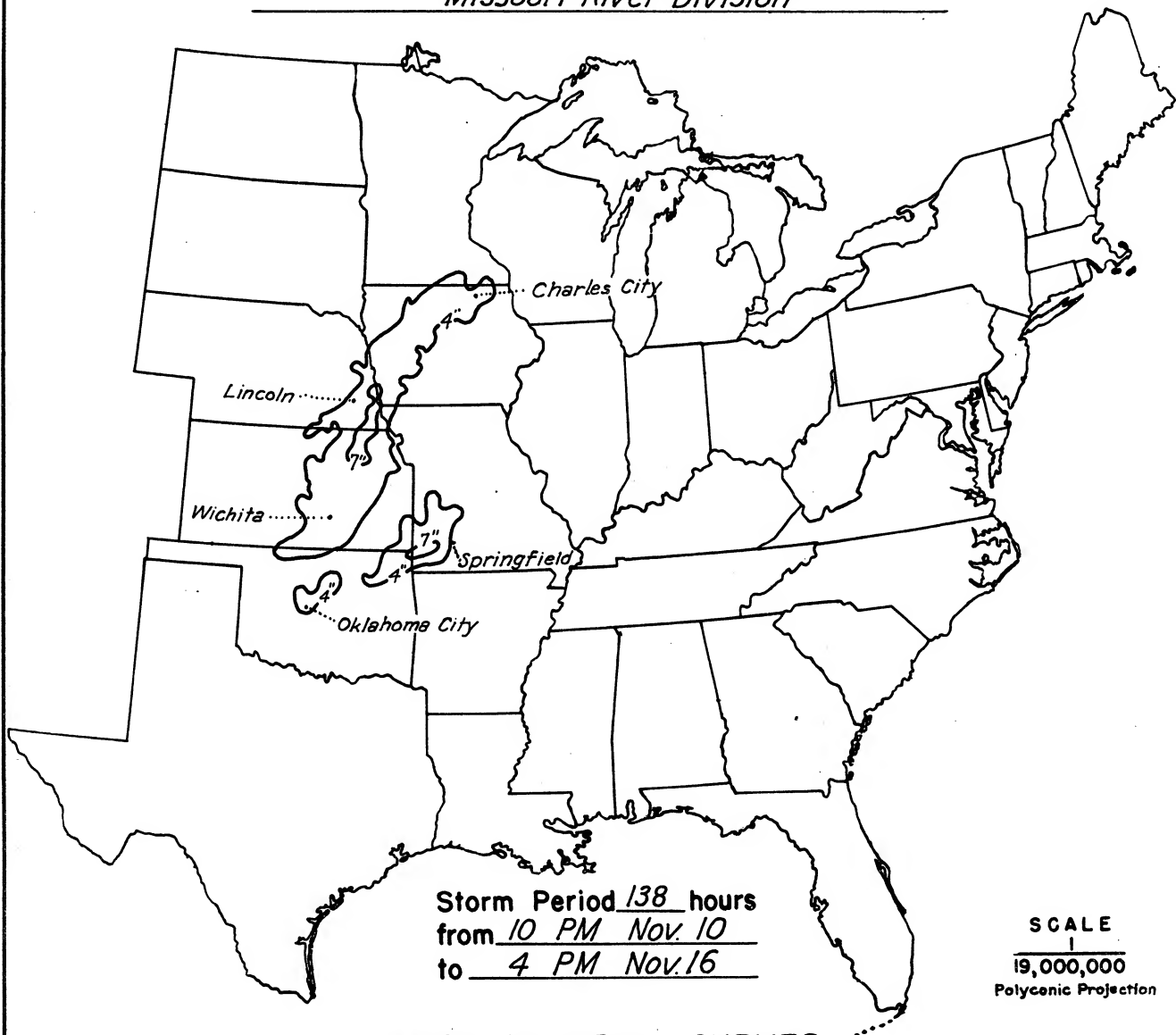
Form S-10 (Data from mass rainfall curves)-----	14
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	28
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	5

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

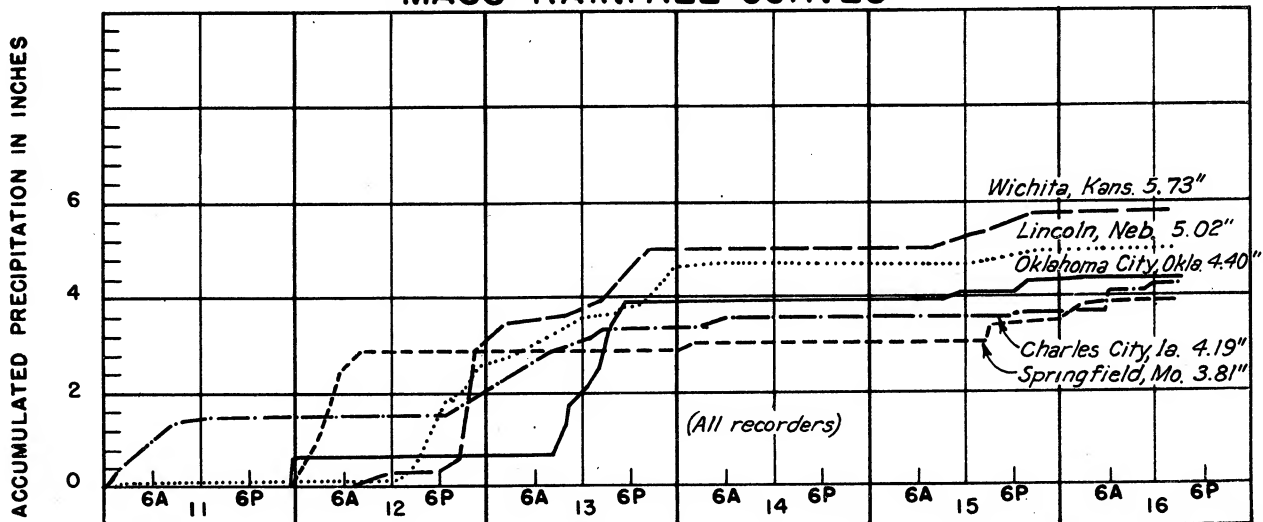
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	138
Max. Station	5.3	6.0	6.2	6.2	7.0	7.5	7.6	8.3	8.3	8.3	9.1
10	5.2	6.0	6.1	6.1	6.7	7.2	7.5	8.1	8.1	8.3	8.9
100	5.0	5.7	5.8	5.8	6.3	6.9	7.4	7.9	7.9	8.1	8.6
200	4.9	5.6	5.7	5.7	6.1	6.8	7.3	7.8	7.8	8.1	8.5
500	4.6	5.2	5.4	5.4	6.0	6.6	7.2	7.5	7.5	8.0	8.2
1,000	4.0	4.6	5.0	5.1	5.8	6.5	7.0	7.3	7.3	7.8	8.0
2,000	3.3	4.0	4.6	4.7	5.6	6.3	6.9	7.0	7.1	7.6	7.7
5,000	2.3	3.2	3.9	4.2	5.4	6.1	6.5	6.5	6.7	7.3	7.3
10,000	1.8	2.7	3.4	3.9	5.2	5.8	6.1	6.1	6.2	6.8	6.9
20,000	1.4	2.4	3.0	3.5	4.7	5.2	5.5	5.5	5.6	6.2	6.3
50,000	1.0	1.9	2.5	3.0	3.7	4.1	4.4	4.5	4.6	5.1	5.5
92,000	0.7	1.3	1.8	2.2	2.8	3.0	3.3	3.6	3.9	4.1	4.8

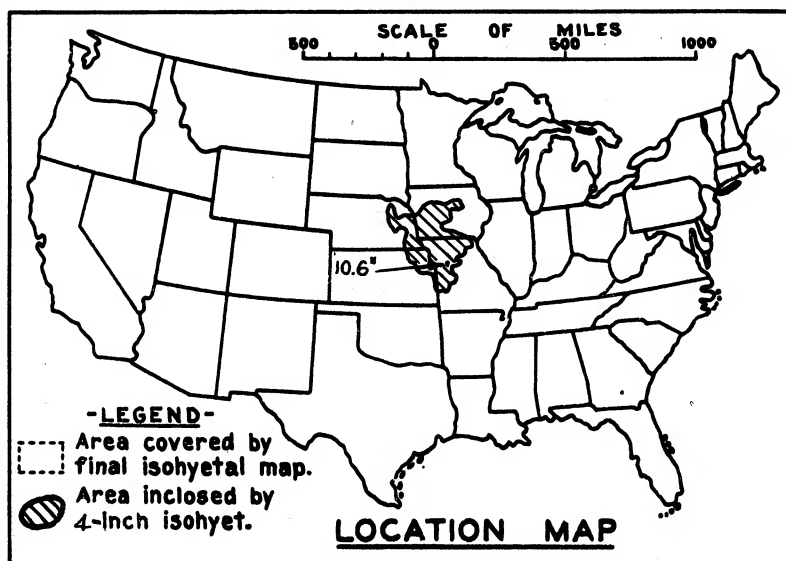
STORM STUDIES - ISOHYETAL MAP

Storm of November 10-16, 1909 Assignment MR 1-29
 Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 25 - 29, 1915

Assignment MR 2 - 7

Location Iowa & Missouri

Study Prepared by:

Missouri River Division

Kansas City District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/8/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/18/44Remarks: Centers at
Lexington, Mo., and
Afton, Iowa.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	12
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	8
Miscl. precip. records, meteorological data, etc.-----	9
Form 5002 (Mass rainfall curves)-----	19

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

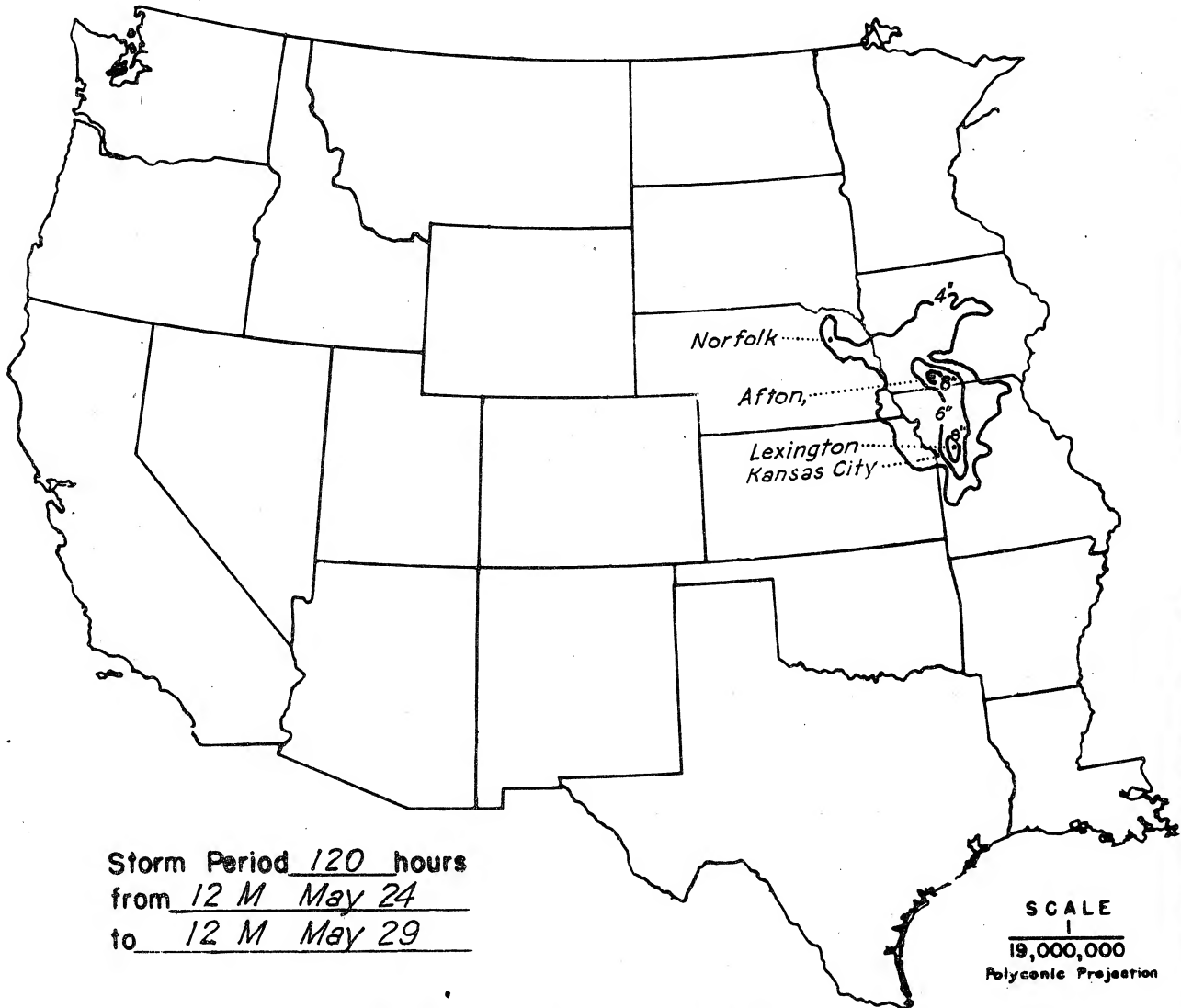
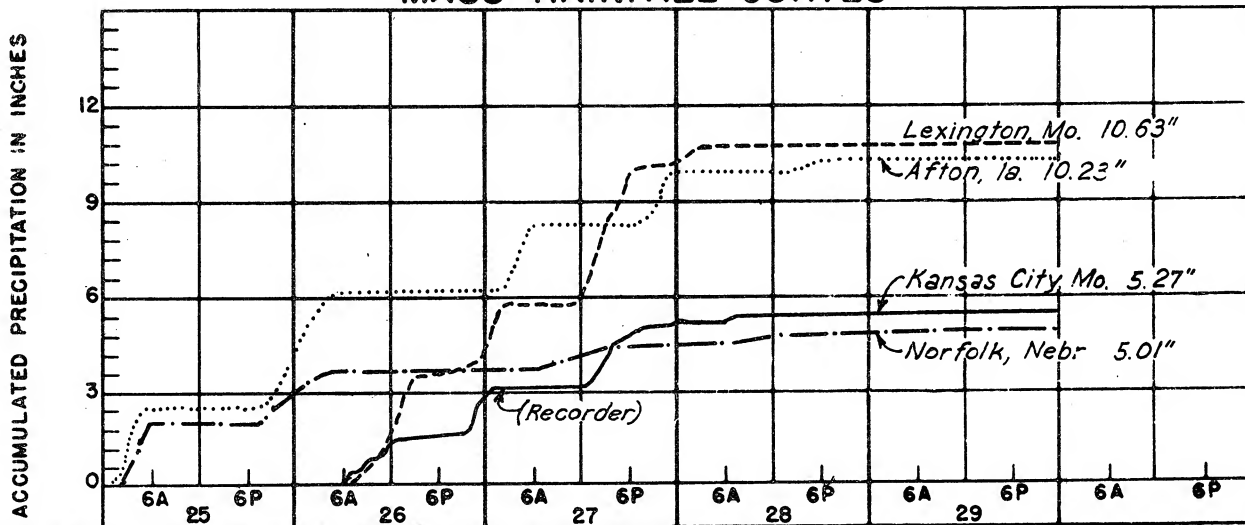
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

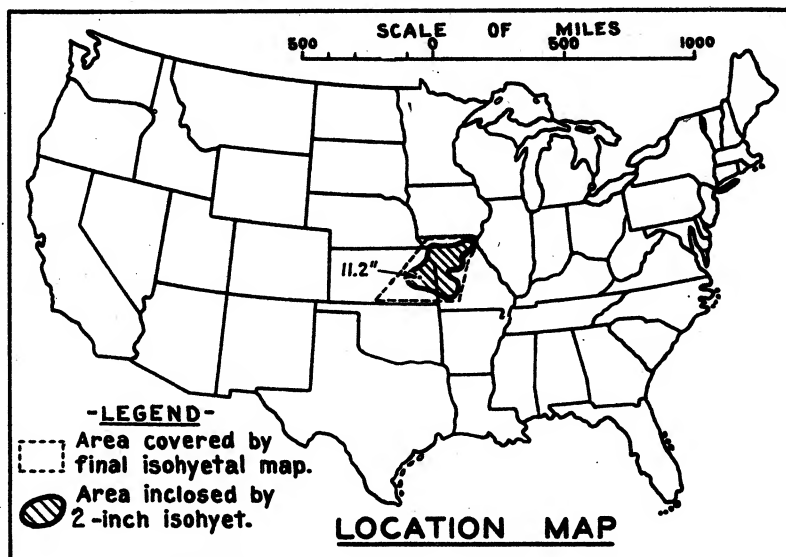
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	4.5	5.8	6.3	6.8	7.9	9.7	10.6	10.6	10.6	10.6	10.6
100	3.6	4.7	5.3	6.0	7.4	8.9	10.2	10.2	10.2	10.2	10.2
200	3.3	4.4	5.0	5.7	7.2	8.6	10.0	10.0	10.0	10.0	10.0
500	2.9	3.9	4.6	5.4	6.8	8.2	9.5	9.5	9.5	9.5	9.5
1,000	2.7	3.6	4.3	5.2	6.4	7.7	8.9	9.0	9.0	9.0	9.0
2,000	2.4	3.3	4.0	5.0	5.9	7.2	8.1	8.3	8.4	8.4	8.5
5,000	2.0	2.9	3.6	4.5	5.0	6.1	6.9	7.2	7.4	7.5	7.6
10,000	1.6	2.5	3.4	4.0	4.3	5.2	5.8	6.2	6.5	6.8	7.0
20,000	1.2	2.1	2.9	3.3	3.5	4.2	4.7	5.3	5.5	6.1	6.2
45,000	0.7	1.2	1.6	2.0	2.5	2.7	3.3	3.9	4.4	5.0	5.1

STORM STUDIES - ISOHYETAL MAP

Storm of May 25-29, 1915 Assignment MR 2-7
Study Prepared by: Kansas City, Mo. District
Missouri River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 6-9, 1915

Assignment MR 2-11

Location Kansas & Missouri

Study Prepared by:

Missouri River Division

Kansas City District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 9/2/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/22/44Remarks: Center at
Moran, Kansas**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	6
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	4
Form 5002 (Mass rainfall curves)-----	9

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

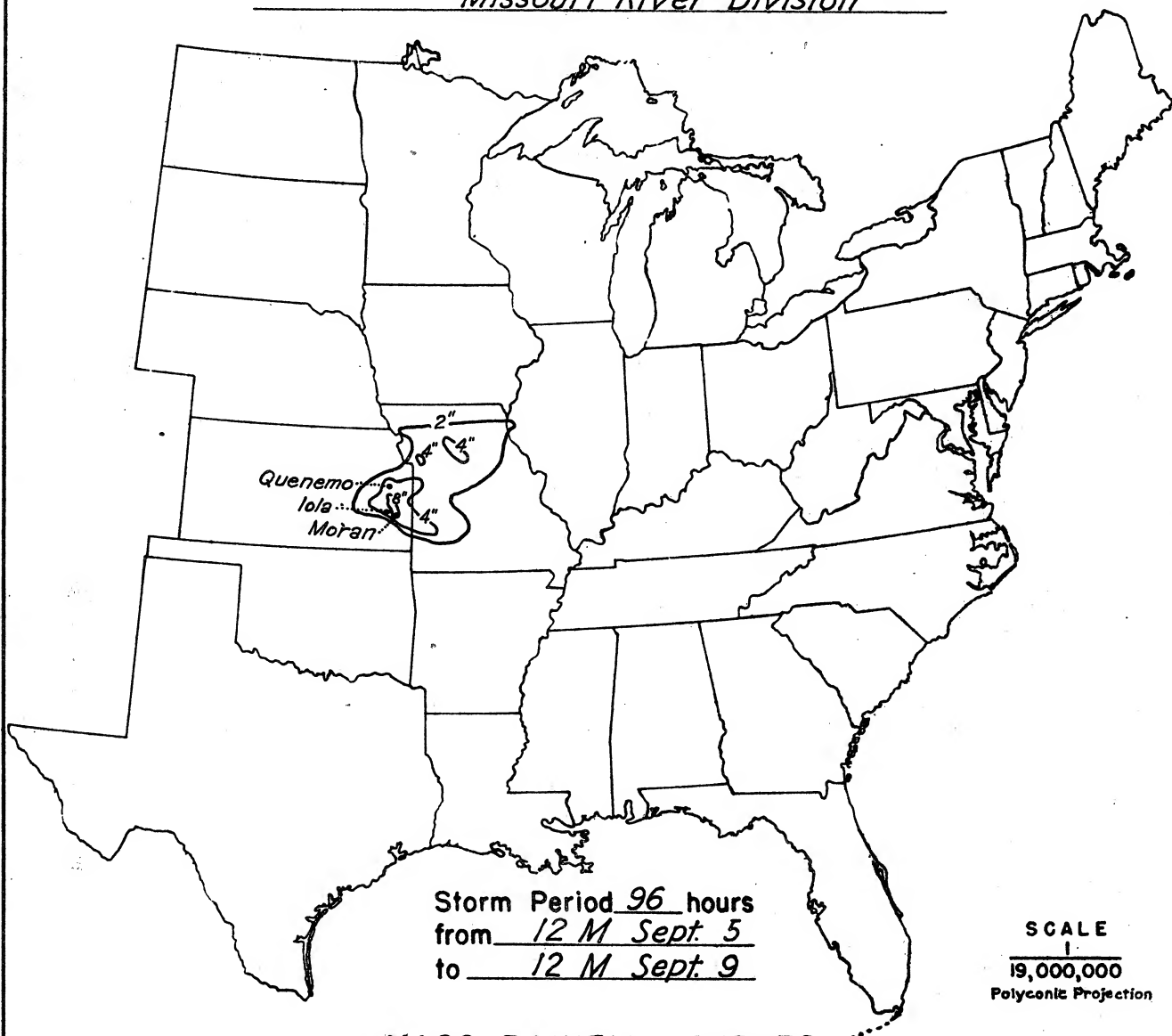
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

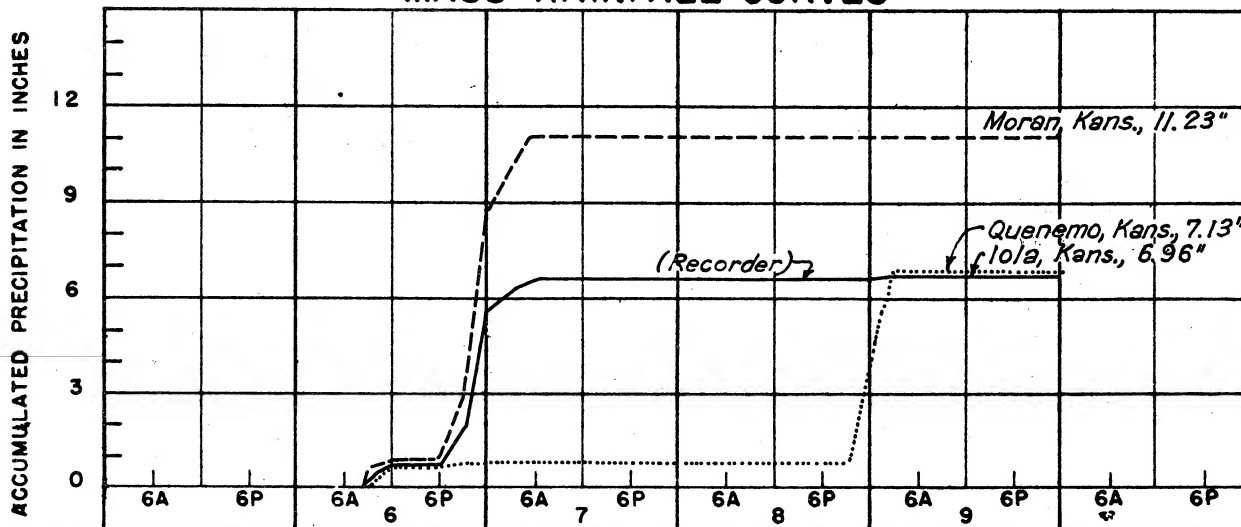
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	8.1	10.3	10.3	11.2	11.2	11.2	11.2	11.2	11.2	11.2	
100	7.5	9.7	9.7	10.6	10.6	10.6	10.6	10.6	10.9	10.9	
200	7.1	9.2	9.2	10.1	10.1	10.1	10.1	10.4	10.7	10.7	
500	6.3	8.2	8.2	9.1	9.1	9.1	9.1	9.8	10.2	10.2	
1,000	5.3	6.6	6.6	7.6	7.6	7.6	7.6	9.0	9.6	9.6	
2,000	4.2	5.1	5.1	5.8	5.8	5.8	5.8	8.0	8.7	8.7	
5,000	2.5	3.8	3.8	4.4	4.4	4.4	4.4	6.4	7.1	7.1	
10,000	1.6	2.9	2.9	3.4	3.4	3.4	3.4	4.9	5.3	5.3	
20,000	1.2	2.2	2.3	2.5	2.5	2.5	2.5	3.8	4.1	4.2	
24,000	1.2	2.0	2.2	2.3	2.3	2.3	2.3	3.6	3.9	4.0	

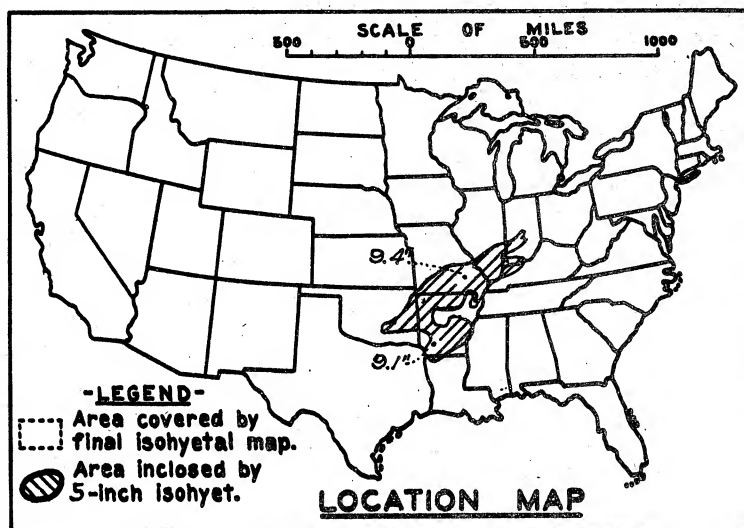
STORM STUDIES - ISOHYETAL MAP

Storm of September 6-9, 1915 Assignment MR 2-11
Study Prepared by: Kansas City, Mo., District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 26-31 January 1916
 Assignment MR 2 - 13
 Location Okla. Ark. Mo. Ill. & Ind.
 Study Prepared by:

Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 1/24/45

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/20/46

Remarks: Centers at
 Ironton, Mo. and
 Camden, Ark.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary Isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 19
 Form 5001-B (24-hour " ")----- 59
 Form 5001-D (" " " ")----- -
 Misc. precip. records, meteorological data, etc.----- 28
 Form 5002 (Mass rainfall curves)----- 48

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

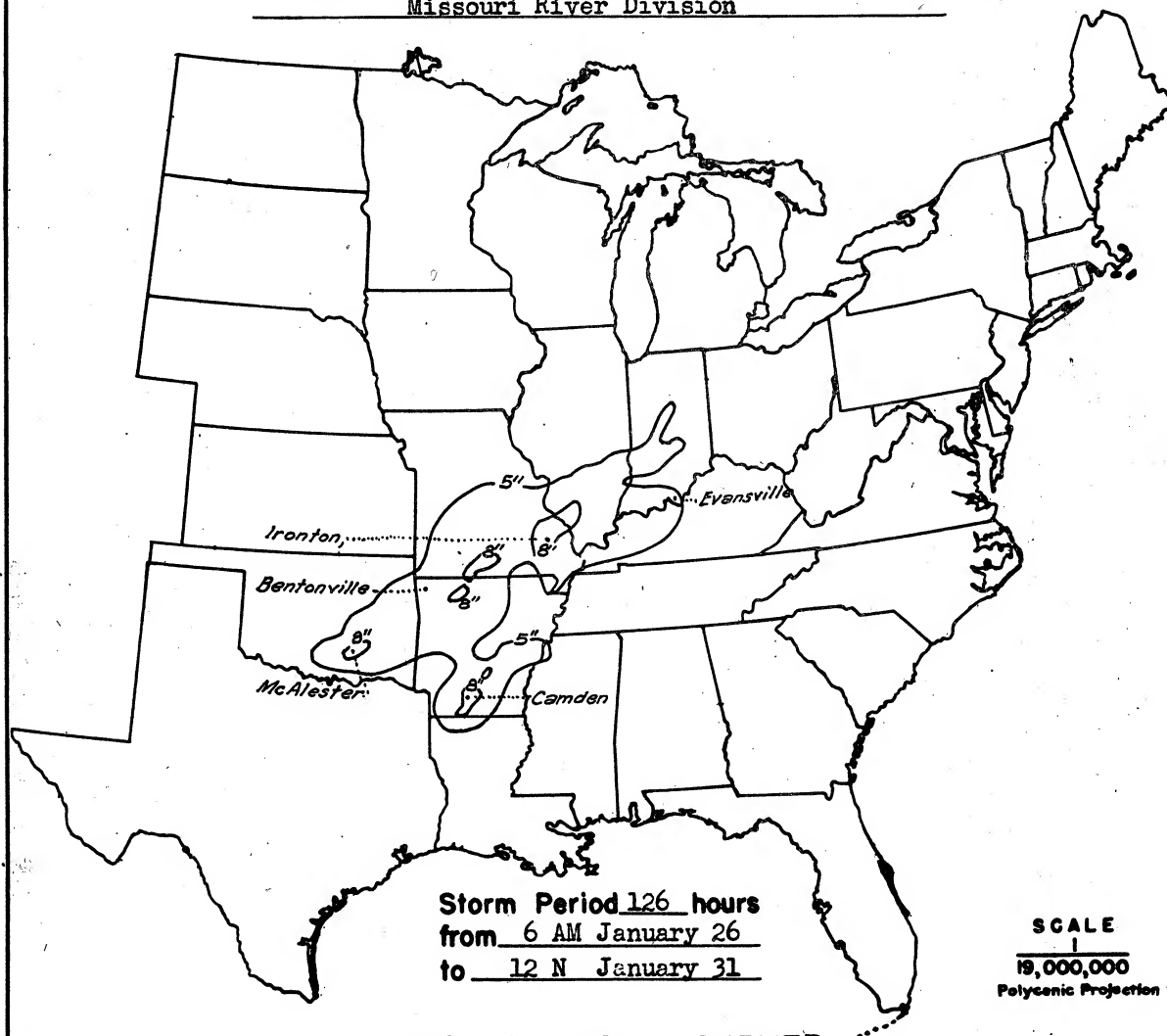
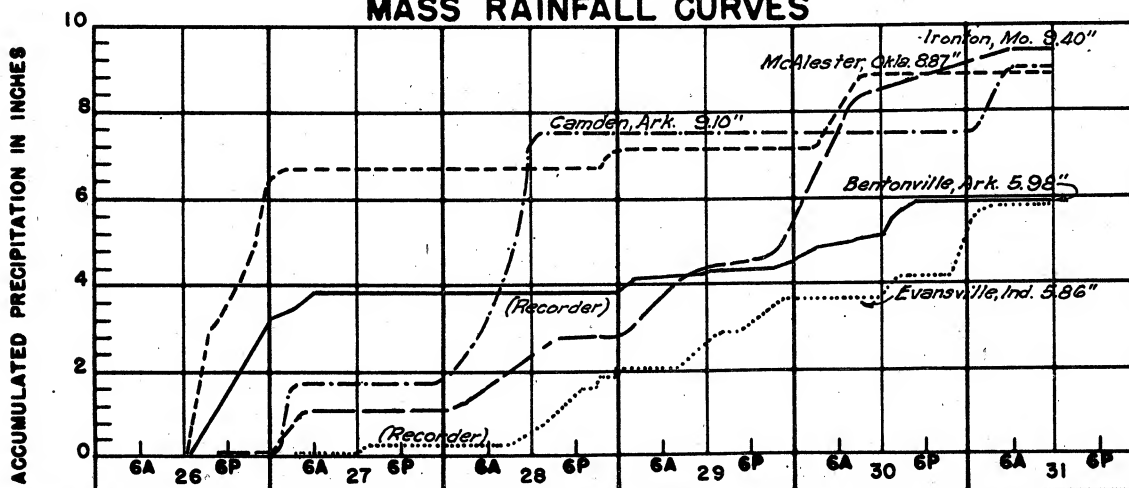
Form S-10 (Data from mass rainfall curves)----- 7
 Form S-11 (Depth-area data from isohyetal map)----- 2
 Form S-12 (Maximum depth-duration data)----- 13
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 3

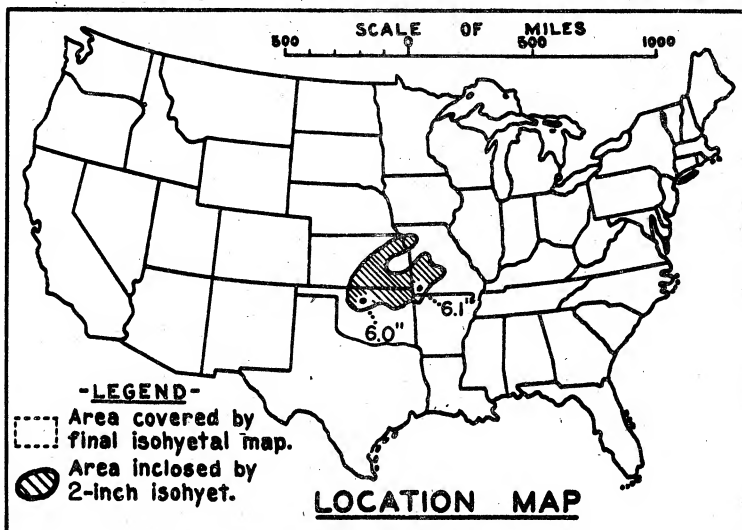
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	3.6	6.0	6.8	6.8	6.9	6.9	7.5	7.7	8.1	9.1	9.4
100	3.4	5.7	6.3	6.6	6.6	6.7	7.3	7.5	7.9	8.9	9.3
200	3.3	5.6	6.1	6.4	6.5	6.6	7.2	7.4	7.8	8.8	9.2
500	3.2	5.3	5.8	6.2	6.2	6.5	7.0	7.3	7.7	8.7	9.0
1,000	3.2	5.0	5.5	5.9	5.9	6.4	6.8	7.2	7.5	8.6	8.8
2,000	3.0	4.8	5.2	5.5	5.5	6.1	6.5	6.9	7.3	8.3	8.6
5,000	2.4	4.0	4.6	4.7	4.8	5.5	5.9	6.3	6.8	7.8	8.2
10,000	1.9	3.0	3.8	4.1	4.3	5.0	5.4	5.7	6.3	7.2	7.8
20,000	1.5	2.4	3.1	3.3	3.7	4.4	4.8	5.1	5.8	6.6	7.4
50,000	1.0	1.6	2.2	2.4	2.9	3.5	3.9	4.3	4.9	5.7	6.7
100,000	0.7	1.2	1.6	1.9	2.4	2.7	3.2	3.6	4.2	5.0	6.1
150,000	0.5	0.9	1.3	1.6	2.0	2.3	2.8	3.2	3.8	4.4	5.4

STORM STUDIES - ISOHYETAL MAP

Storm of January 26-31, 1916 Assignment MR 2-13
 Study Prepared by: Kansas City, Mo. District
Missouri River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 6-8 Nov. 1918

Assignment MR 2-18

Location Mo., Kans. and Okla.

Study Prepared by:

Missouri River Division

Kansas City District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 9/12/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/28/46Remarks: Centers at Neosha,
Mo. and Guthrie, Okla.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " " " ")-----	-
Form 5001-D (" " " ")-----	7
Misc. precip. records, meteorological data, etc.-----	7
Form 5002 (Mass rainfall curves)-----	13

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

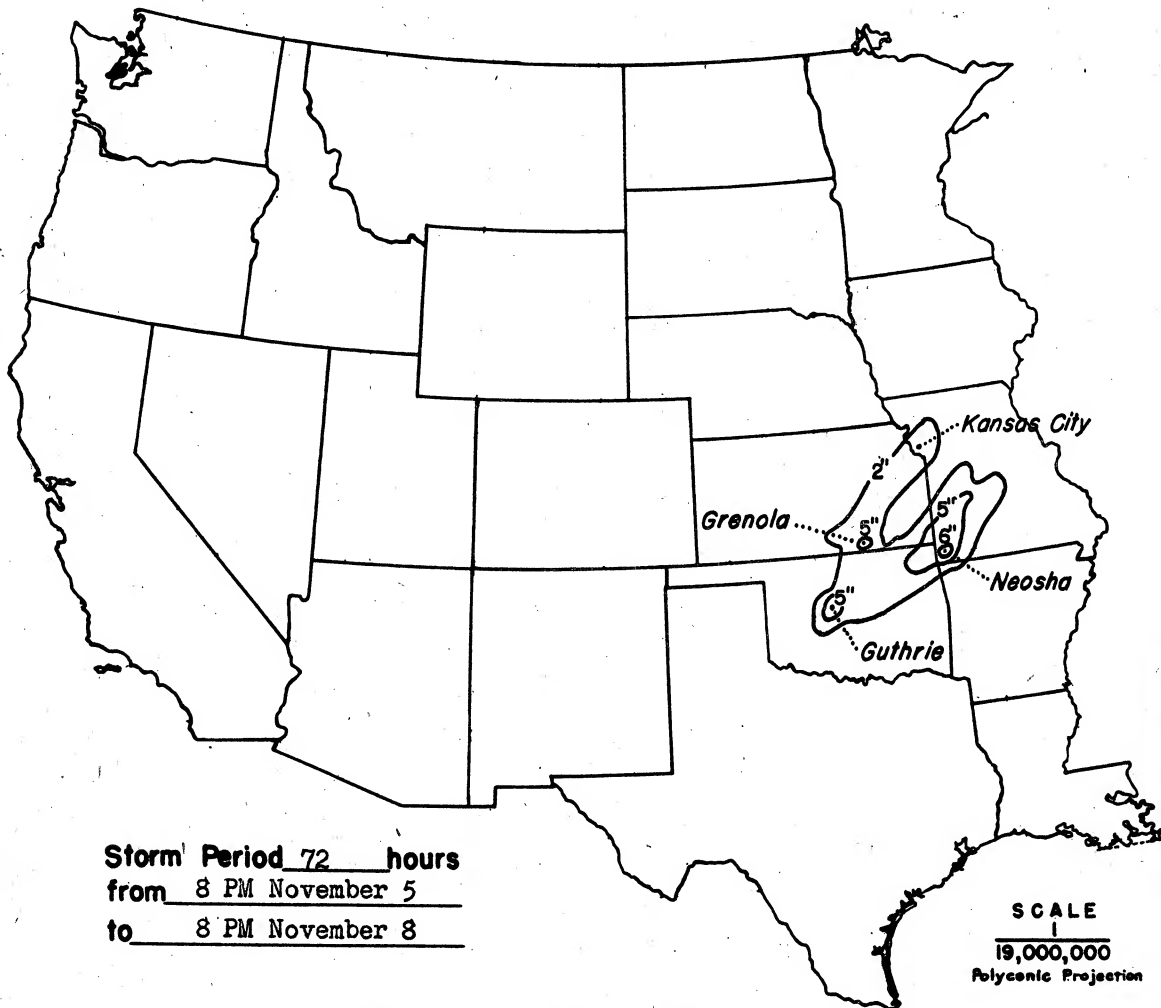
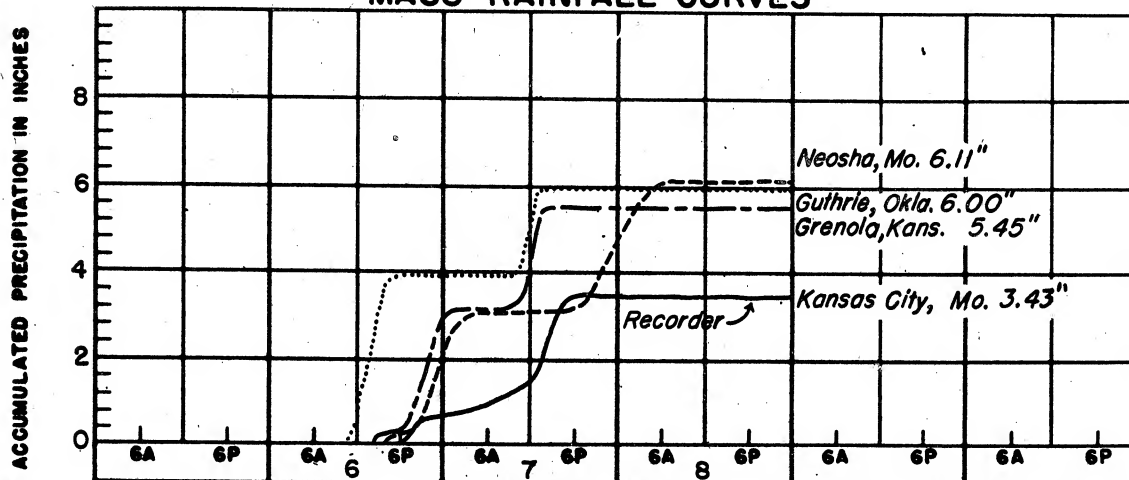
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

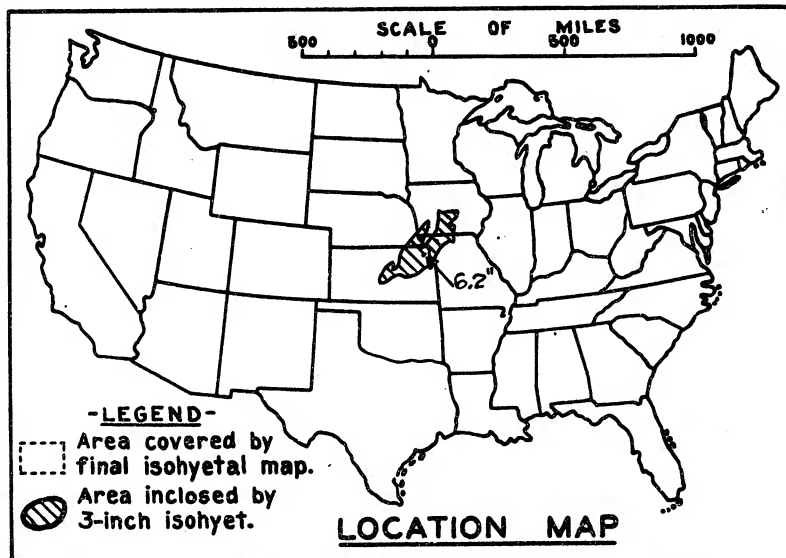
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	4.0	4.6	5.0	5.4	6.0	6.0	6.1	6.1	6.1	
100	3.5	4.1	4.5	5.1	5.6	5.7	5.9	5.9	5.9	
200	3.4	3.9	4.4	4.9	5.5	5.6	5.9	5.9	5.9	
500	3.2	3.7	4.2	4.7	5.3	5.6	5.8	5.8	5.8	
1,000	3.0	3.5	4.0	4.5	5.1	5.4	5.7	5.7	5.7	
2,000	2.9	3.4	3.8	4.3	4.9	5.4	5.6	5.6	5.6	
5,000	2.6	3.2	3.5	4.0	4.6	5.1	5.3	5.3	5.3	
10,000	2.4	2.9	3.3	3.7	4.2	4.6	4.8	4.8	4.8	
20,000	1.8	2.4	2.8	3.4	3.8	4.1	4.2	4.2	4.2	
34,500	1.1	1.8	2.4	3.1	3.4	3.6	3.6	3.6	3.6	

STORM STUDIES - ISOHYETAL MAP

Storm of November 6-8, 1918 Assignment MR 2-18
Study Prepared by: Kansas City, Mo., District
Missouri River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of March 14 - 16, 1919
 Assignment MR 2 - 19
 Location Iowa, Kan., & Mo.
 Study Prepared by:
 Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/9/44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/17/45
 Remarks: Center at
 Atchison, Kansas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 8
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 8
 Misc. precip. records, meteorological data, etc.----- 4
 Form 5002 (Mass rainfall curves)----- 18

PART II

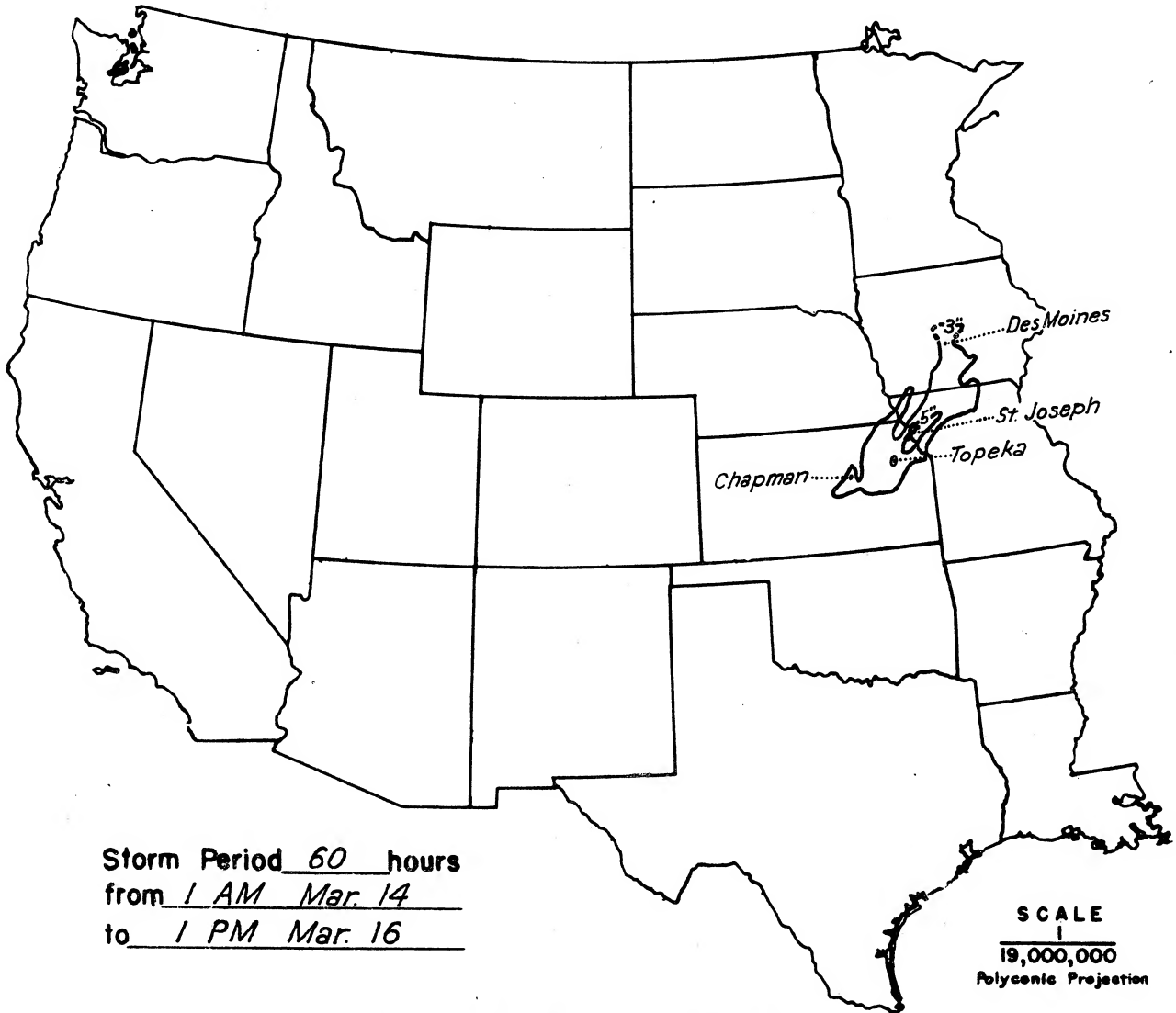
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 3
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 7
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	60	
10	3.7	5.1	5.7	6.0	6.0	6.0	6.2	6.2	
100	3.5	4.9	5.5	5.7	5.7	5.7	6.0	6.0	
200	3.4	4.8	5.4	5.5	5.6	5.6	5.8	5.8	
500	3.1	4.7	5.2	5.2	5.4	5.4	5.6	5.6	
1,000	2.9	4.6	4.9	5.0	5.1	5.1	5.4	5.4	
2,000	2.6	4.4	4.7	4.8	4.9	4.9	5.1	5.1	
5,000	2.3	4.0	4.2	4.4	4.4	4.4	4.7	4.7	
10,000	2.0	3.5	3.9	4.0	4.0	4.0	4.2	4.2	
20,000	1.6	3.0	3.4	3.5	3.5	3.6	3.7	3.7	
33,000	1.3	2.5	2.9	3.0	3.0	3.1	3.2	3.2	

STORM STUDIES - ISOHYETAL MAP

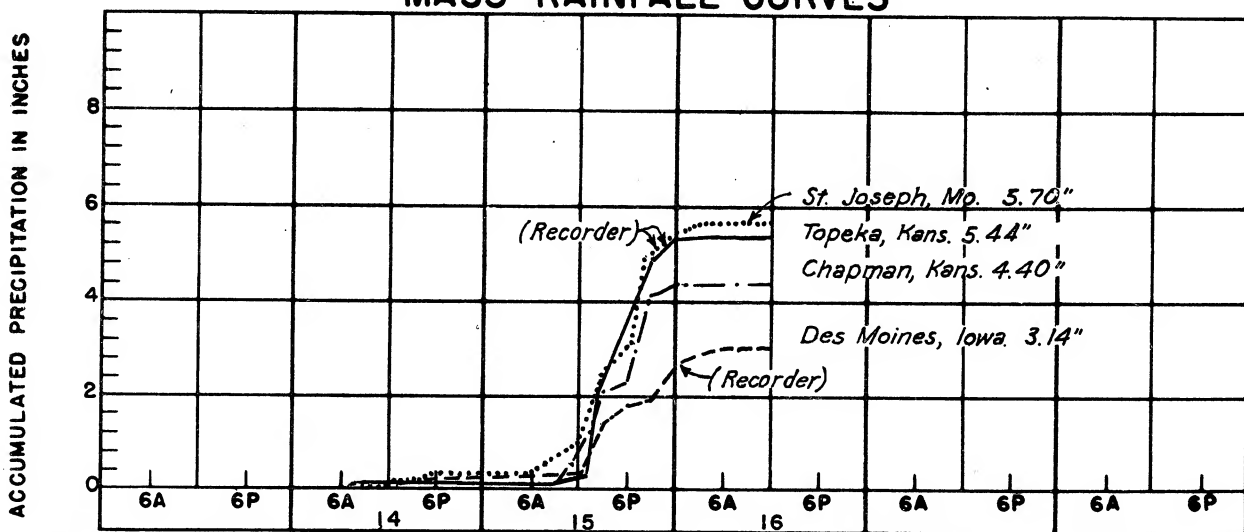
Storm of March 14-16, 1919 Assignment MR 2-19
Study Prepared by: Kansas City, Mo. District
Missouri River Division

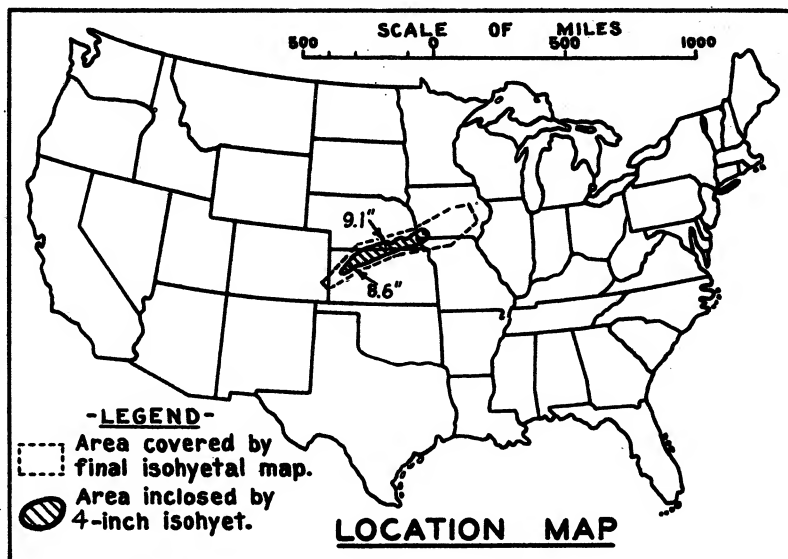


Storm Period 60 hours
from 1 AM Mar. 14
to 1 PM Mar. 16

SCALE
1
19,000,000
Polyconic Projection

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 16-19, 1919

Assignment MR 2-23

Location Kansas, Nebr. Mo.

Study Prepared by: & Ia.

Missouri River Division

Kansas City District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/5/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/15/44

Remarks: Center at

Bruning, Nebr.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	26
Form 5001-B (24-hour " ")-----	32
Form 5001-D (" " " ")-----	0
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	30

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

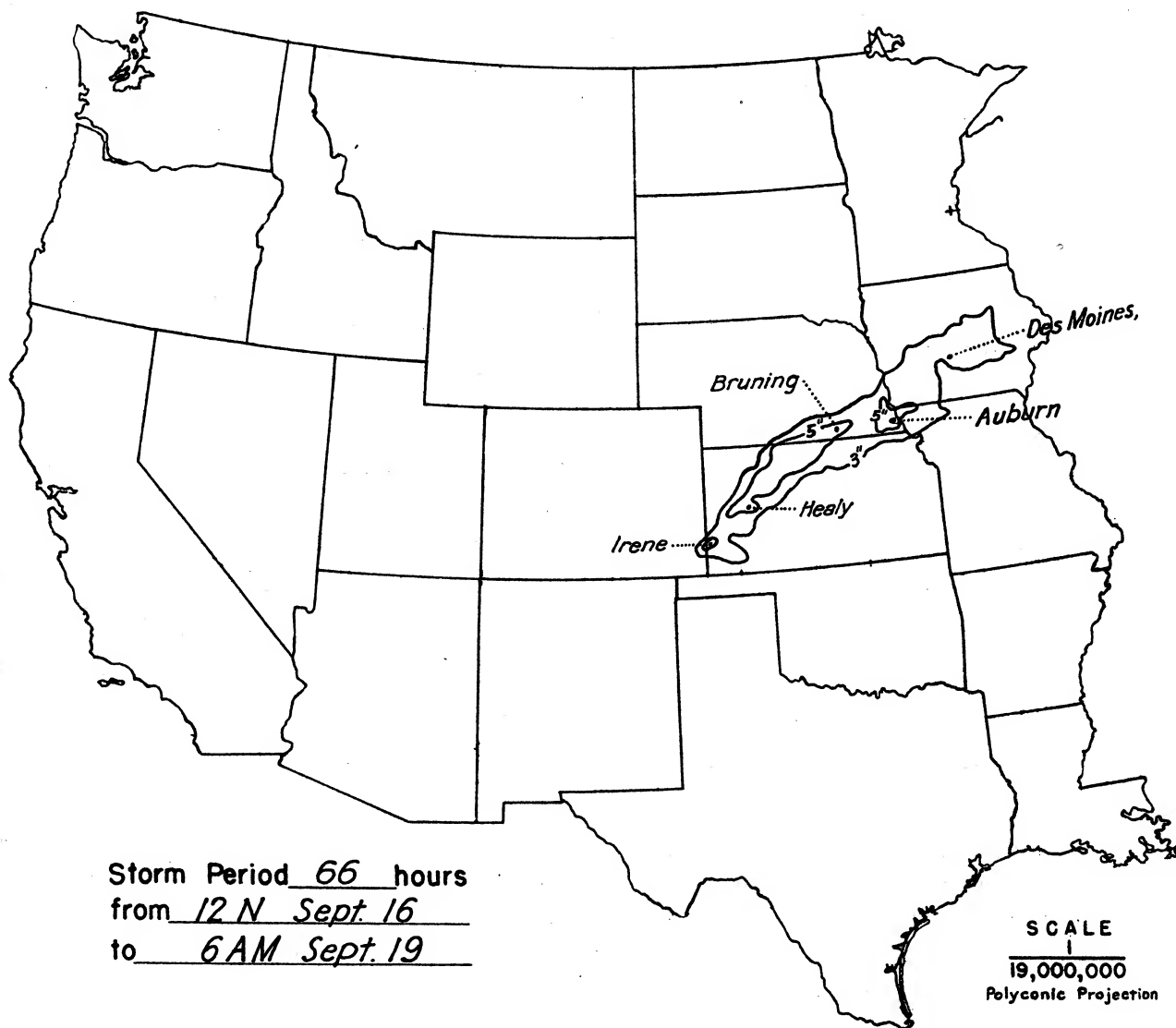
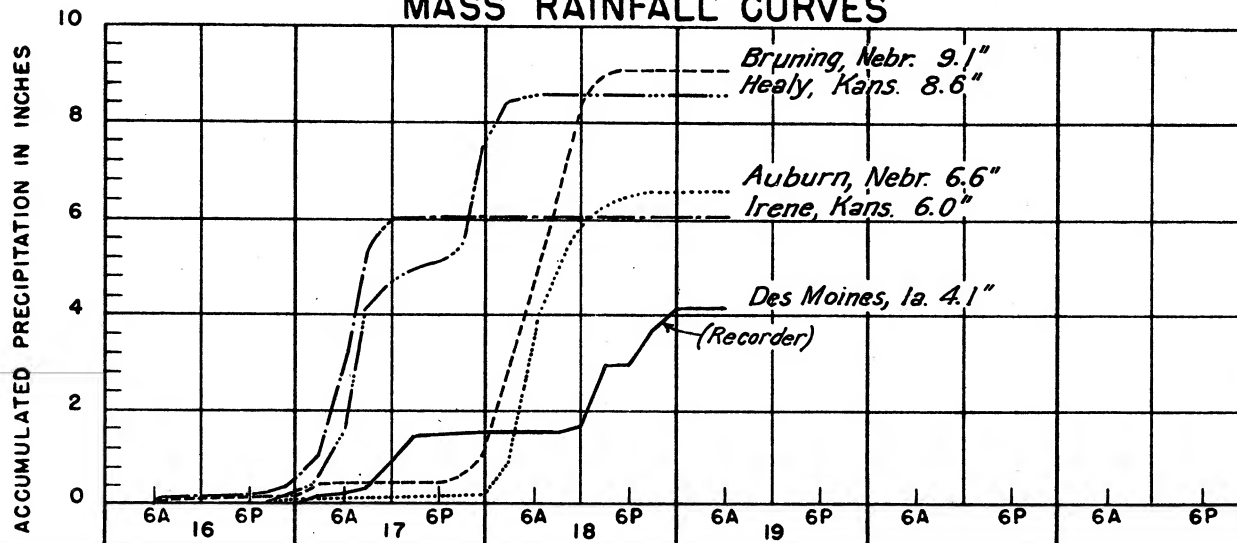
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

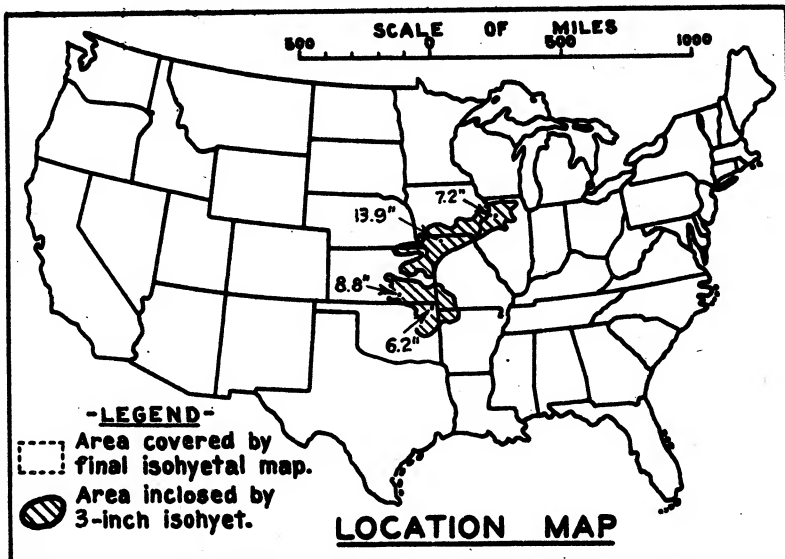
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	66	
10	6.0	7.5	8.4	8.7	8.7	8.7	9.1	9.1	9.1	
100	5.5	7.1	7.9	8.3	8.3	8.3	8.6	8.6	8.6	
200	5.2	6.9	7.7	8.1	8.1	8.2	8.5	8.5	8.5	
500	4.8	6.5	7.2	7.7	7.9	8.0	8.2	8.2	8.2	
1,000	4.4	6.1	6.8	7.4	7.7	7.8	7.8	8.0	8.0	
2,000	4.0	5.5	6.2	7.0	7.5	7.6	7.7	7.7	7.7	
5,000	3.4	4.6	5.4	6.3	6.9	7.1	7.2	7.2	7.2	
10,000	2.9	3.9	4.7	5.5	6.1	6.4	6.6	6.7	6.7	
20,000	2.2	3.2	3.9	4.5	5.0	5.4	5.7	5.8	5.8	
50,000	1.2	2.0	2.5	2.9	3.2	3.6	4.1	4.4	4.5	
58,350	1.0	1.8	2.2	2.6	2.9	3.3	3.8	4.1	4.2	

STORM STUDIES - ISOHYETAL MAP

Storm of September 16-19, 1919 Assignment MR 2-23
Study Prepared by: Kansas City, Mo. District
Missouri River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 9 - 12, 1922

Assignment M R 2 - 29

Location Ill., Ia., Kan., Mo. & Okla.

Study Prepared by:

Missouri River Division
Kansas City DistrictPart I Reviewed by H. M. Sec. of
Weather Bureau, 6/1/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/29/44Remarks: Centers at
Grant City, Mo., and
Winfield, Kans.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	18
Form 5001-B (24-hour " ")-----	1
Form 5001-D (" " " ")-----	19
Misc. precip. records, meteorological data, etc.-----	10
Form 5002 (Mass rainfall curves)-----	43

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

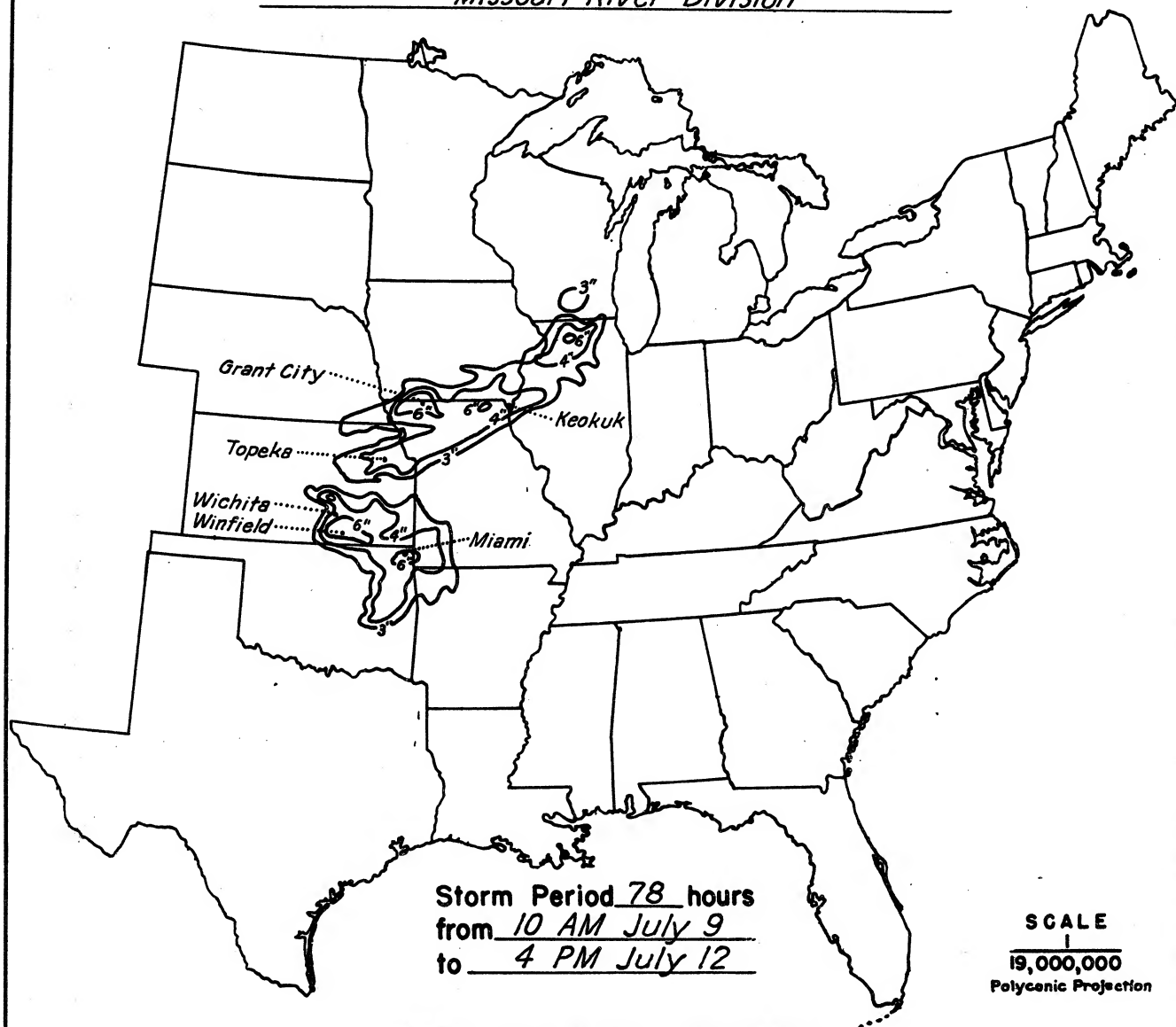
Form S-10 (Data from mass rainfall curves)-----	7
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	14
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

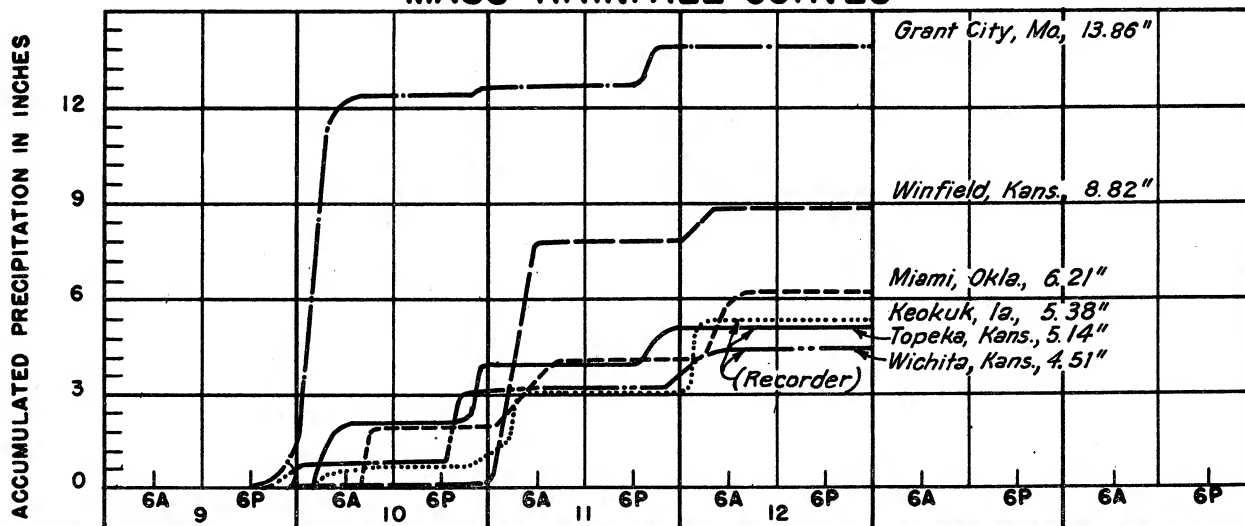
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	78
10	10.8	12.1	12.2	12.2	12.5	12.5	12.5	13.9	13.9	13.9
100	9.9	10.7	11.3	11.3	11.4	11.6	12.0	12.9	12.9	12.9
200	9.6	10.3	11.0	11.0	11.0	11.3	11.7	12.4	12.4	12.4
500	8.9	9.6	10.2	10.2	10.3	10.5	10.8	11.6	11.6	11.6
1,000	7.9	8.7	9.3	9.3	9.4	9.5	9.6	10.6	10.6	10.6
2,000	6.5	7.3	7.6	7.6	7.8	8.1	8.3	9.2	9.2	9.2
5,000	4.2	4.8	5.2	5.2	5.6	6.4	6.7	7.3	7.3	7.3
10,000	3.0	3.5	3.9	3.9	4.3	5.3	5.7	6.3	6.3	6.3
20,000	2.2	2.7	3.0	3.0	3.5	4.4	4.8	5.4	5.4	5.4
50,000	1.5	2.0	2.2	2.2	2.8	3.4	3.7	4.4	4.5	4.5
100,000	1.1	1.5	1.6	1.7	2.3	2.2	2.9	3.9	4.0	4.0
113,500	0.9	1.3	1.4	1.5	2.1	2.5	2.7	3.8	3.9	3.9

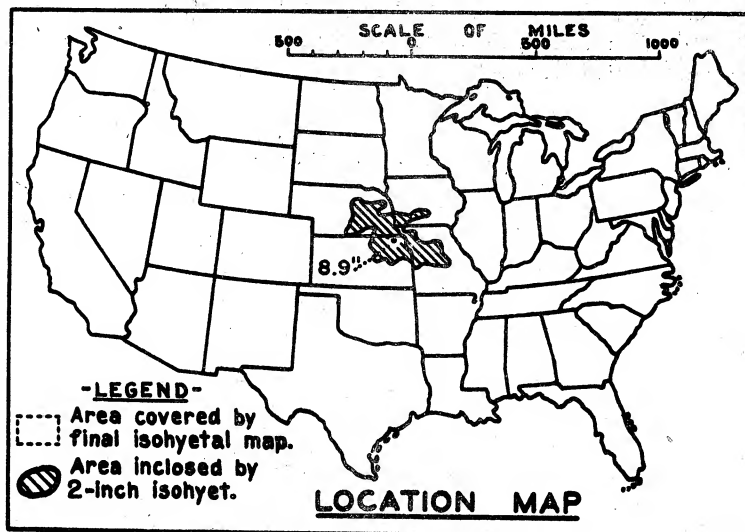
STORM STUDIES - ISOHYETAL MAP

Storm of July 9-12, 1922 Assignment MR 2-29
Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 14 - 18 June 1925
 Assignment M R 3-5
 Location Ia., Kans., Mo., & Nebr
 Study Prepared by:
 Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12/20/45
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/11/47

Remarks:

Center at
 Horton, Kansas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	8
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	7
Misc. precip. records, meteorological data, etc.-----	5
Form 5002 (Mass rainfall curves)-----	16

PART II

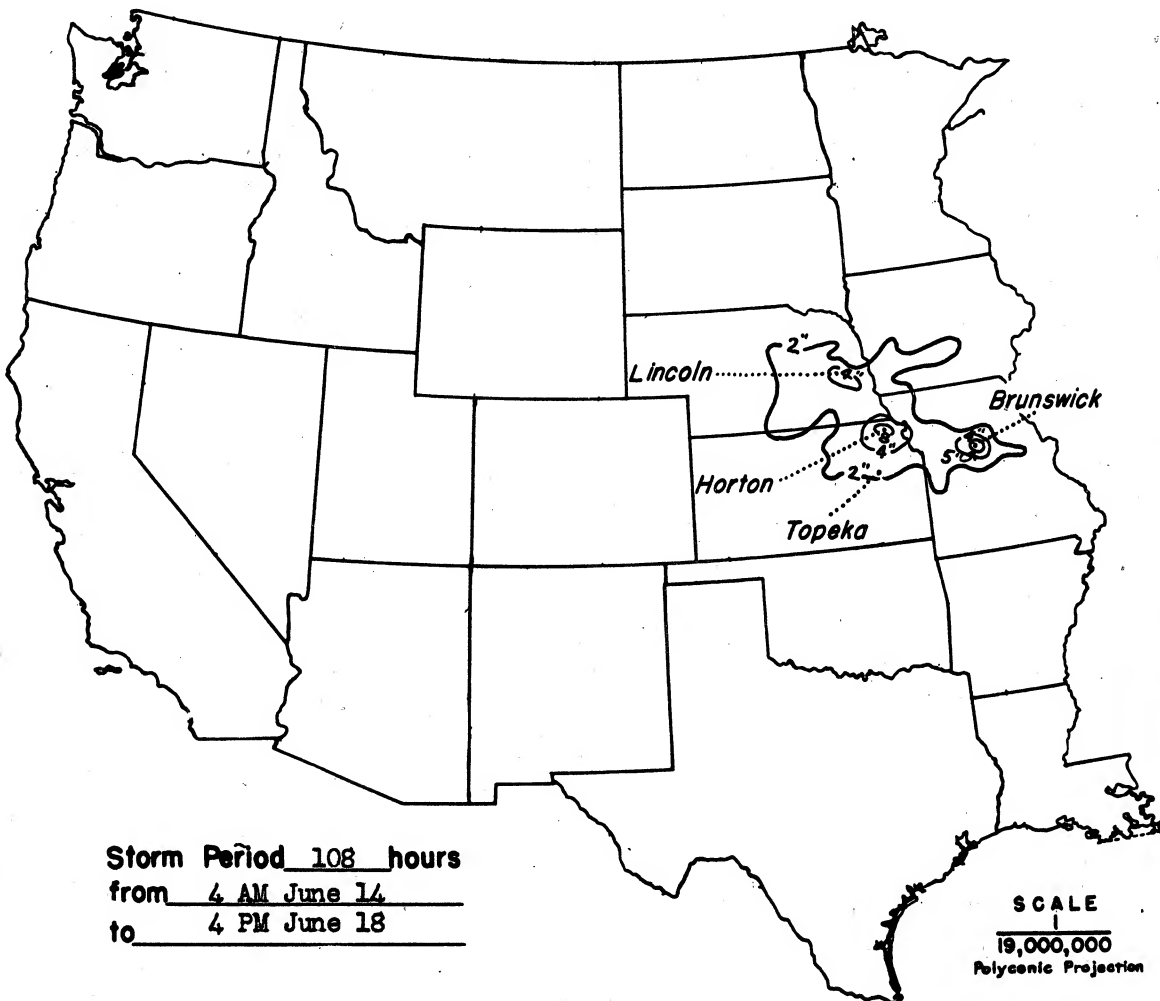
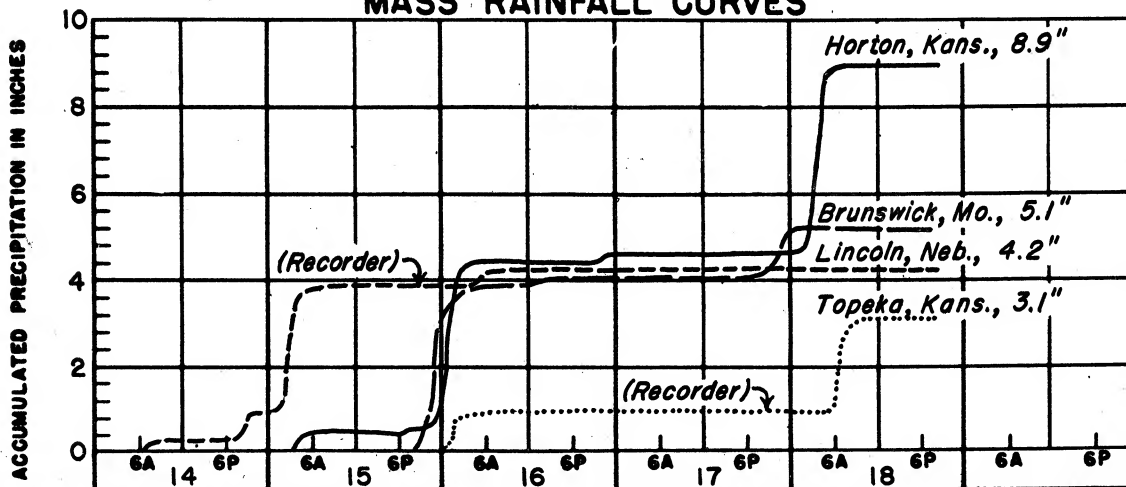
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

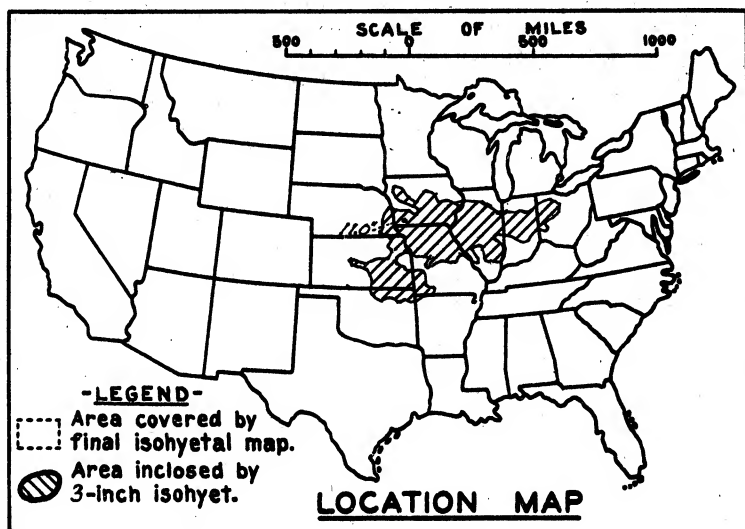
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	54	72	96	108
10	4.4	4.4	4.4	4.4	4.4	4.6	4.9	8.1	8.5	8.9	8.9
100	4.0	4.2	4.2	4.2	4.4	4.5	4.6	7.6	8.0	8.4	8.4
200	3.8	4.1	4.1	4.1	4.3	4.4	4.5	7.3	7.7	8.1	8.1
500	3.5	3.9	3.9	3.9	4.1	4.2	4.2	6.8	7.2	7.6	7.6
1,000	3.2	3.7	3.7	3.7	3.9	4.0	4.0	6.1	6.7	7.1	7.1
2,000	3.0	3.4	3.4	3.4	3.6	3.7	3.7	5.2	6.0	6.3	6.3
5,000	2.5	2.7	2.8	2.9	2.9	3.0	3.1	4.0	4.9	5.0	5.0
10,000	1.9	2.1	2.3	2.4	2.4	2.5	2.6	3.3	4.1	4.3	4.3
20,000	1.2	1.5	1.6	1.7	1.9	2.1	2.3	2.8	3.1	3.5	3.6
28,000	0.9	1.2	1.3	1.3	1.7	2.0	2.3	2.6	2.7	3.1	3.3

STORM STUDIES - ISOHYETAL MAPStorm of June 14-18, 1925Assignment MR 3-5Study Prepared by: Kansas City, Mo. DistrictMissouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 31 Aug. - 5 Sept. 1926

Assignment M R 3 - 8

Location Mo. Kans. Nebr. Ia. Ill. Ind.

Study Prepared by: & Ohio

Missouri River Division

Kansas City District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10-2-44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5-3-46

Remarks: Center at:

Clarinda, Iowa

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	54
Form 5001-B (24-hour " ")-----	75
Form 5001-D (" " " ")-----	—
Misc. precip. records, meteorological data, etc.-----	24
Form 5002 (Mass rainfall curves)-----	75

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

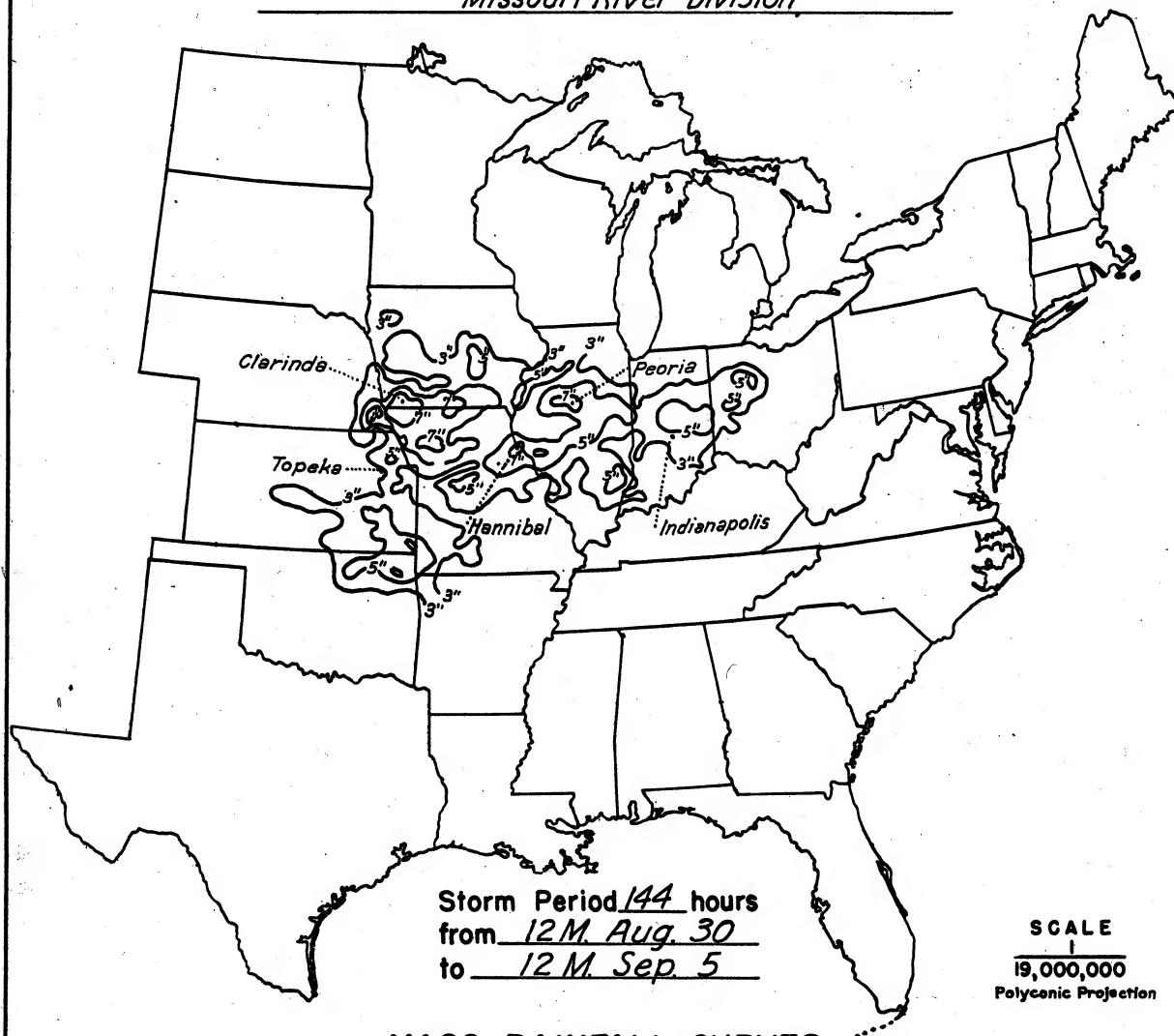
Form S-10 (Data from mass rainfall curves)-----	26
Form S-11 (Depth-area data from isohyetal map)-----	6
Form S-12 (Maximum depth-duration data)-----	80
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	10

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

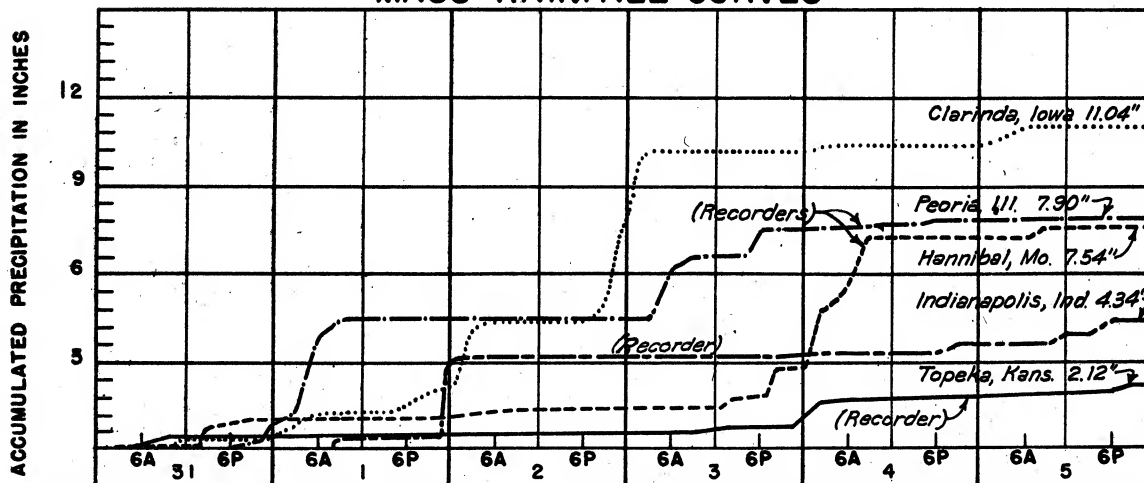
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	60	72	96	120	144
10	6.3	6.4	7.0	7.2	8.7	9.3	9.7	10.1	10.4	11.0	11.0
100	6.1	6.1	6.7	7.0	8.4	8.8	9.6	9.9	10.2	10.8	10.8
200	5.9	5.9	6.4	6.8	8.3	8.5	9.3	9.7	10.0	10.6	10.6
500	5.4	5.4	6.0	6.5	7.7	7.9	8.7	9.1	9.3	10.1	10.2
1,000	4.6	4.8	5.5	6.1	7.0	7.2	7.9	8.3	8.7	9.5	9.6
2,000	3.6	4.2	5.1	5.7	6.4	6.7	7.1	7.6	8.0	8.5	8.9
5,000	2.5	3.4	4.4	5.0	5.9	6.2	6.4	6.7	7.1	7.4	7.9
10,000	1.9	2.7	3.9	4.4	5.4	5.7	5.8	6.1	6.4	6.7	7.2
20,000	1.4	2.1	3.1	3.6	4.6	5.0	5.2	5.4	5.8	6.1	6.5
50,000	1.0	1.6	2.0	2.4	3.3	3.7	4.4	4.5	4.9	5.3	5.7
100,000	0.9	1.2	1.6	1.9	2.6	3.1	3.6	3.8	4.3	4.8	5.2
177,000	0.5	0.7	1.0	1.2	1.8	2.3	2.8	3.0	3.6	4.1	4.4

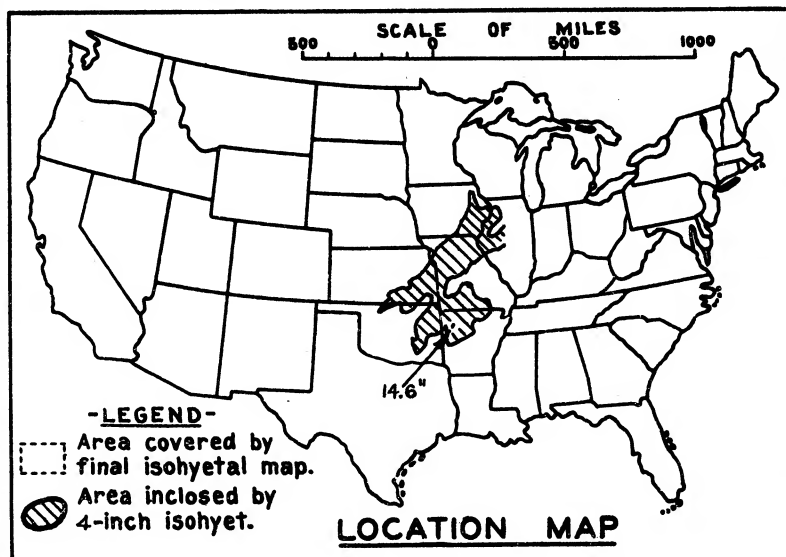
STORM STUDIES - ISOHYETAL MAP

Storm of August 31 to September 5, 1926 Assignment MR 3-8
 Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 28 - Oct. 2, 1927

Assignment M R 3 - 14

Location Okla. Kans. Ark. Mo.

Study Prepared by:

Missouri River Division

Kansas City District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 1/15/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/14/45Remarks: Centers at;
Dutton, Ark., Pleasanton, Kans.
and Oklahoma City, Okla.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	19
Form 5001-B (24-hour " ")-----	52
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	24
Form 5002 (Mass rainfall curves)-----	51

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	22
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

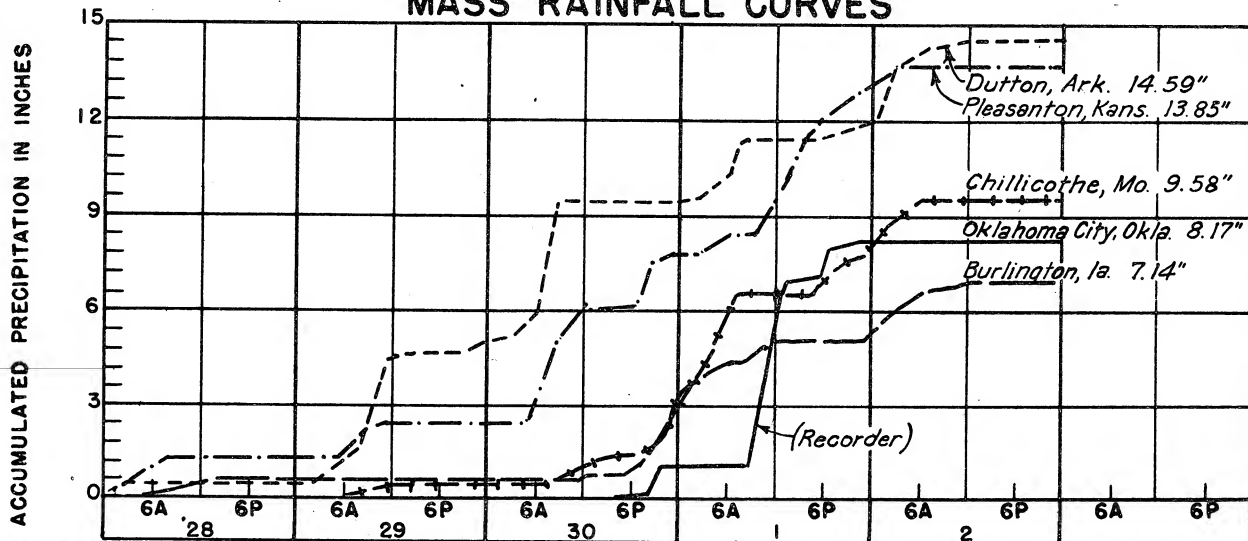
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	5.9	7.0	7.1	8.8	8.9	9.4	11.2	11.3	12.9	14.0	14.6
100	4.2	6.1	6.7	7.6	8.2	8.9	10.5	10.6	12.4	13.4	14.0
200	3.9	5.8	6.4	7.2	7.9	8.7	10.2	10.3	12.2	13.2	13.7
500	3.4	5.2	5.9	6.6	7.5	8.3	9.6	9.9	11.7	12.6	13.1
1,000	3.1	4.8	5.5	6.1	7.2	7.8	9.1	9.4	11.2	12.0	12.4
2,000	2.8	4.3	5.0	5.7	6.8	7.3	8.5	8.8	10.2	10.9	11.3
5,000	2.3	3.7	4.3	5.0	6.0	6.6	7.5	7.9	8.9	9.5	9.9
10,000	2.0	3.2	3.8	4.3	5.4	6.0	6.7	7.0	7.8	8.5	8.9
20,000	1.6	2.6	3.3	3.7	4.7	5.3	5.9	6.2	6.8	7.4	7.8
50,000	1.2	1.9	2.6	2.9	3.7	4.2	4.6	5.0	5.5	6.0	6.4
100,000	0.8	1.4	2.0	2.4	2.8	3.2	3.7	4.0	4.4	5.0	5.3
120,000	0.7	1.3	1.9	2.2	2.6	3.0	3.5	3.8	4.1	4.7	5.0

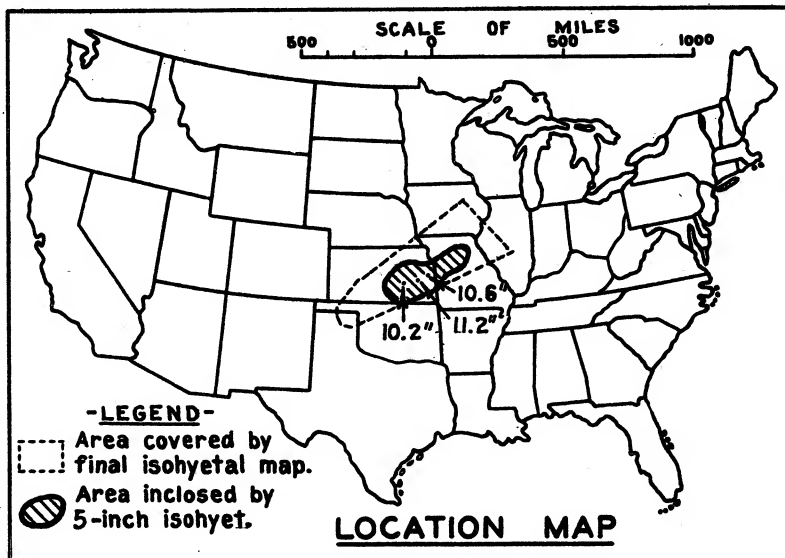
STORM STUDIES - ISOHYETAL MAP

Storm of September 28-October 2, 1927 Assignment MR 3-14
 Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of November 15-17, 1928
 Assignment MR 3-20
 Location Near Southeastern Kans.
 Study Prepared by:
 Missouri River Division,
 Kansas City District Office.

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12/5/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/27/44

Remarks: Centers at
 Lebo, Kansas, and
 Eldorado, Kansas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	16
Form 5001-B (24-hour " ")-----	10
Form 5001-D (" " " ")-----	10
Misc. precip. records, meteorological data, etc.-----	3
Form 5002 (Mass rainfall curves)-----	19

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

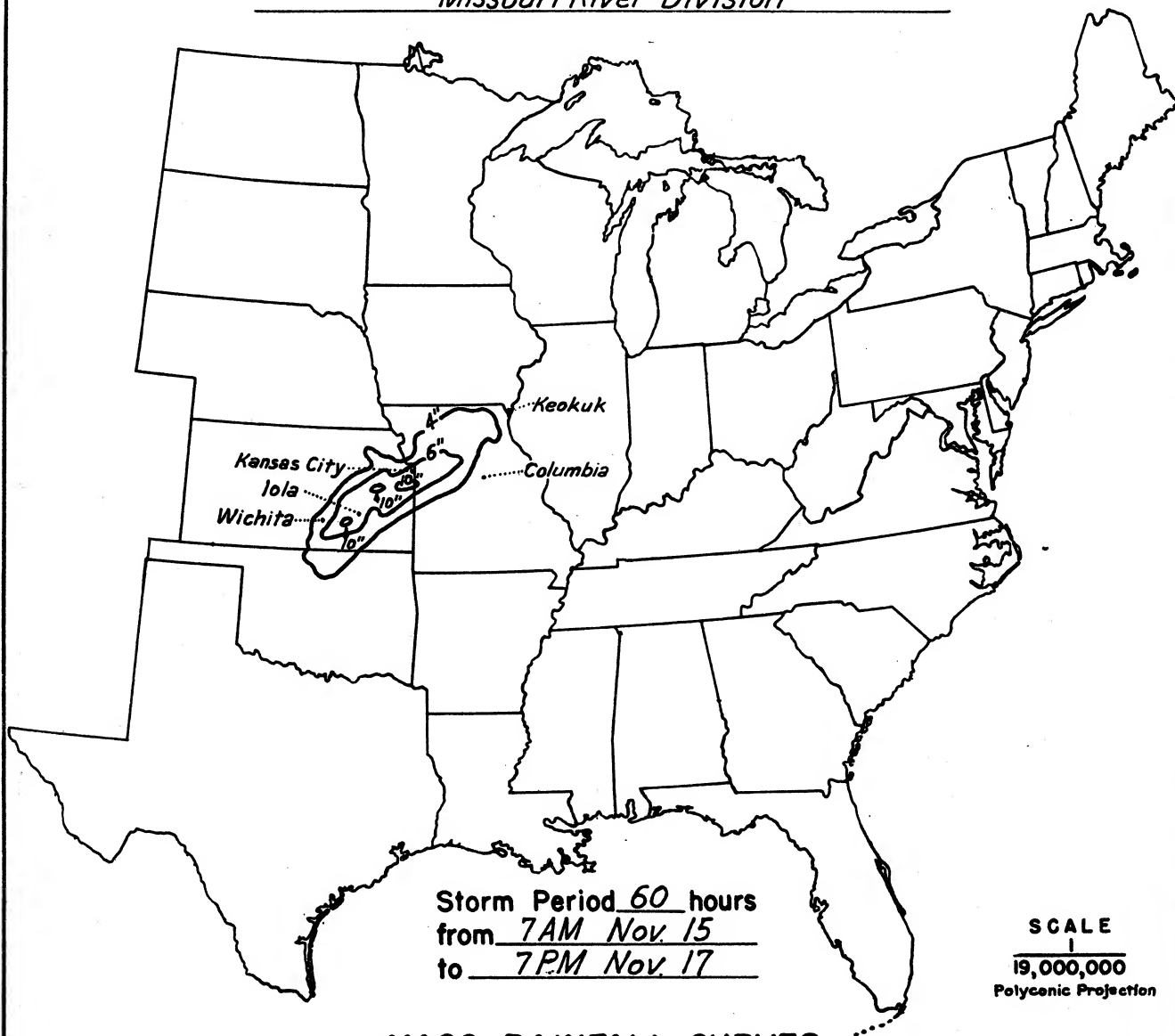
Form S-10 (Data from mass rainfall curves)-----	6
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

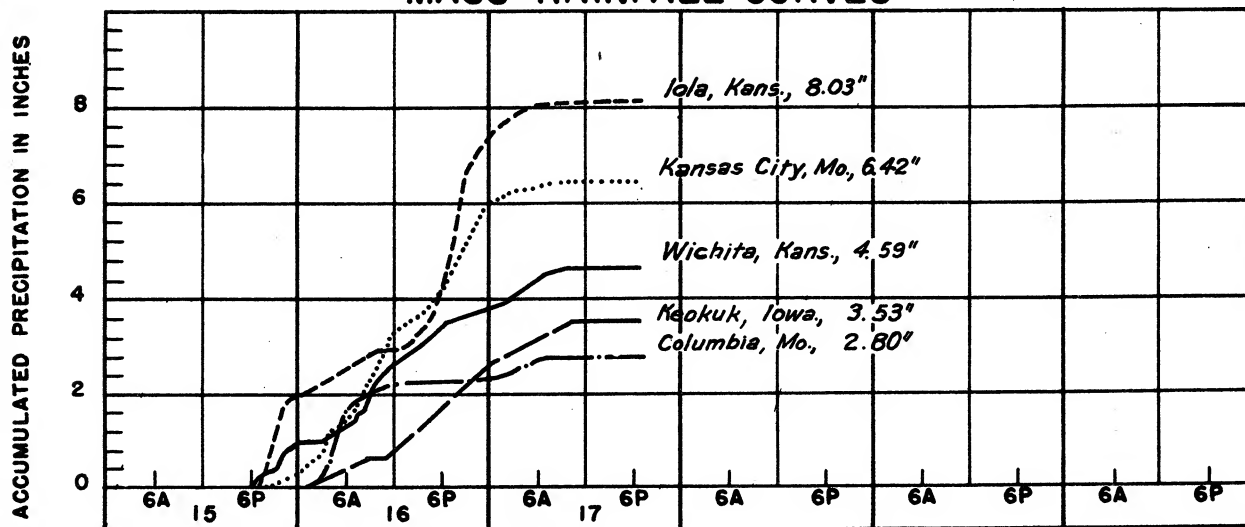
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	60	
10	4.9	6.8	7.8	9.9	10.7	11.1	11.2	11.2	
100	4.5	6.1	7.2	9.1	10.2	10.5	10.6	10.6	
200	4.4	5.9	7.0	8.8	10.0	10.3	10.4	10.4	
500	4.1	5.6	6.6	8.4	9.7	10.0	10.1	10.1	
1,000	3.9	5.3	6.4	8.1	9.4	9.8	9.9	9.9	
2,000	3.7	5.0	6.0	7.7	9.0	9.5	9.6	9.6	
5,000	3.3	4.5	5.3	7.1	8.4	8.9	9.1	9.1	
10,000	2.8	3.9	4.7	6.4	7.6	8.2	8.3	8.3	
20,000	2.2	3.3	4.0	5.4	6.5	7.1	7.2	7.2	
50,000	1.3	2.3	3.0	3.9	4.7	5.3	5.4	5.4	
60,000	1.2	2.1	2.8	3.6	4.3	4.9	5.1	5.1	

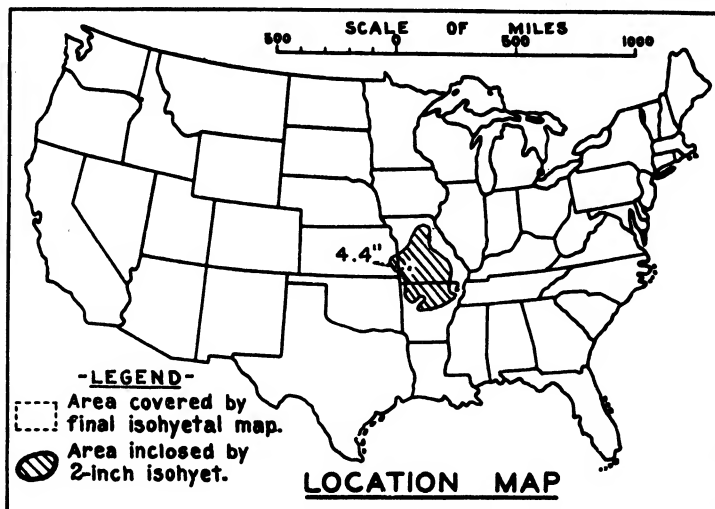
STORM STUDIES - ISOHYETAL MAP

Storm of November 15-17, 1928 Assignment MR-3-20
Study Prepared by: Kansas City, Mo., District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 7-9 April 1929
 Assignment MR 3-21
 Location Arkansas and Missouri
 Study Prepared by:
 Missouri River Division
 Kansas City District

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 4/7/50
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/1/56

Remarks: Center at Lockwood,
 Missouri.

Dewpoint 62°, Ref. Pt. 210 SW
 of Lockwood, Mo.

Grid F-14

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 7
 Form 5001-B (24-hour " ")----- 0
 Form 5001-D (" " " ")----- 8
 Misc. precip. records, meteorological data, etc.----- 3
 Form 5002 (Mass rainfall curves)----- 20

PART II

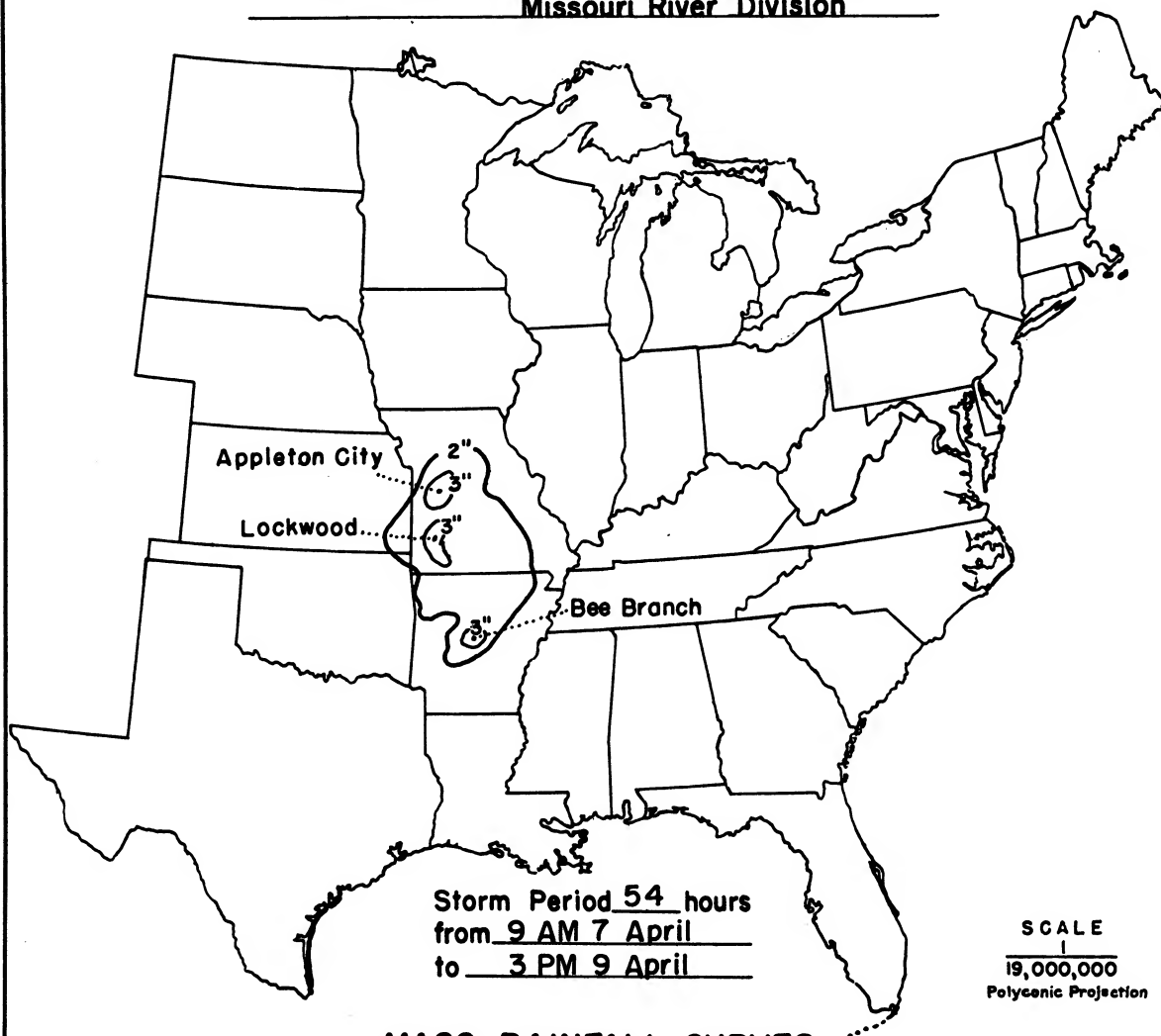
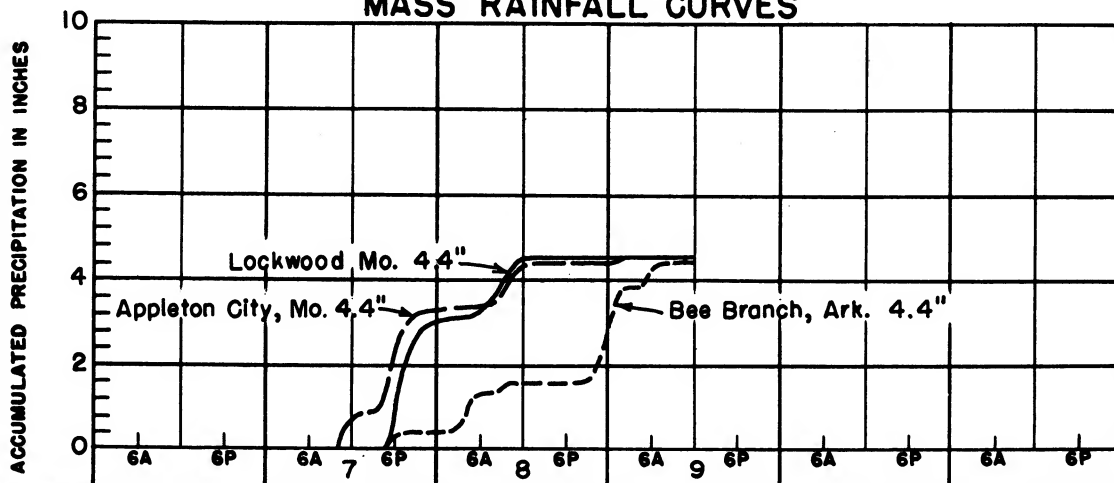
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

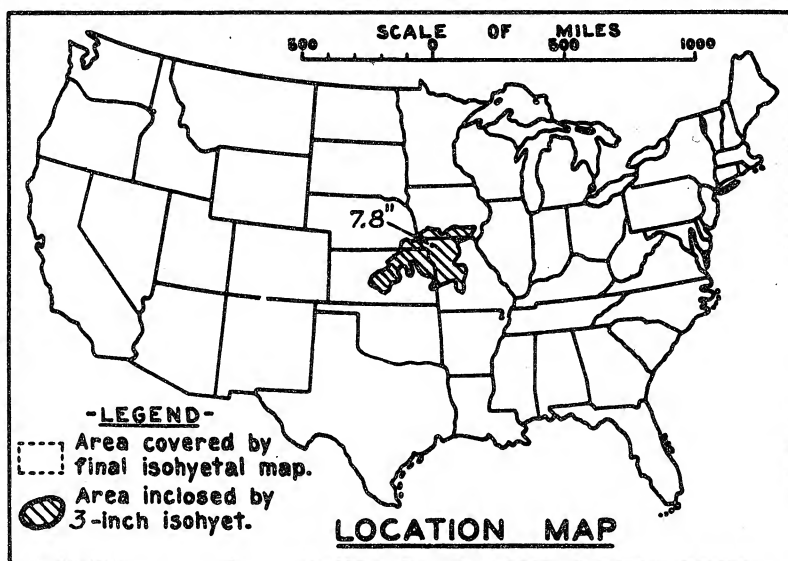
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 3
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 5
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	54	
10	2.9	3.2	4.3	4.4	4.4	4.4	4.4	4.4	
100	2.5	3.2	3.7	4.3	4.3	4.3	4.3	4.3	
200	2.4	3.0	3.5	4.2	4.3	4.3	4.3	4.3	
500	2.2	2.8	3.2	4.0	4.1	4.1	4.1	4.1	
1,000	2.0	2.6	3.0	3.7	3.9	3.9	4.0	4.0	
2,000	1.8	2.4	2.8	3.5	3.6	3.7	3.8	3.8	
5,000	1.5	2.0	2.5	3.0	3.2	3.3	3.4	3.4	
10,000	1.3	1.8	2.2	2.7	2.8	3.0	3.2	3.2	
20,000	1.0	1.5	1.9	2.4	2.5	2.7	2.9	3.0	
48,800	0.6	1.1	1.5	1.9	2.0	2.3	2.6	2.7	

STORM STUDIES - ISOHYETAL MAPStorm of 7-9 April 1929 Assignment MR 3-21Study Prepared by: Kansas City, Mo. District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 29 May - 3 June 1929

Assignment M R 3 - 25

Location Ia., Kans., Mo.

Study Prepared by:

Missouri River Division

Kansas City District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/13/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 8/28/45

Remarks: Center at:

Bethany, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	34
Form 5001-B (24-hour " ")-----	39
Form 5001-D (" " " ")-----	--
Misc. precip. records, meteorological data, etc.-----	21
Form 5002 (Mass rainfall curves)-----	40

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

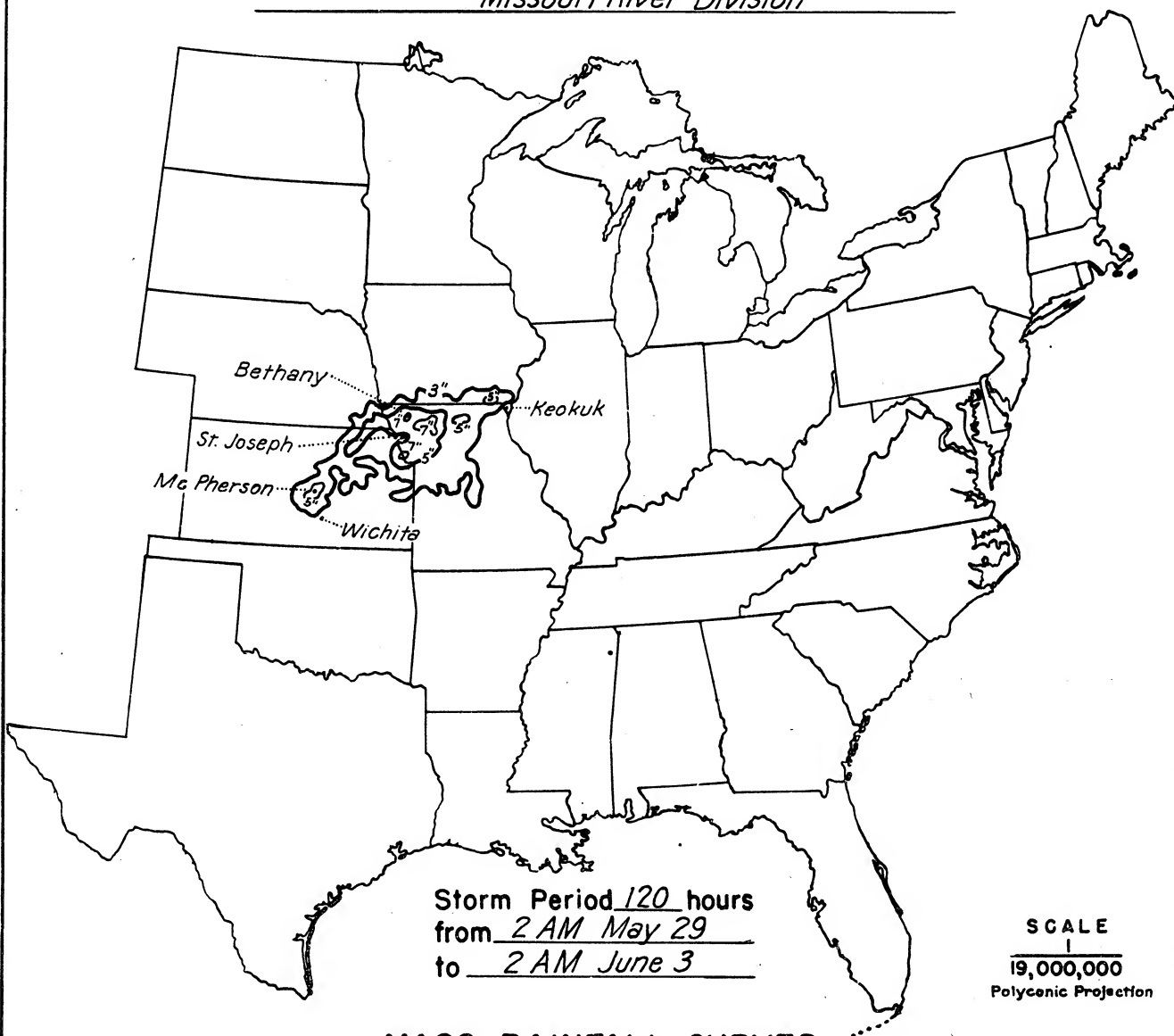
Form S-10 (Data from mass rainfall curves)-----	7
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	17
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

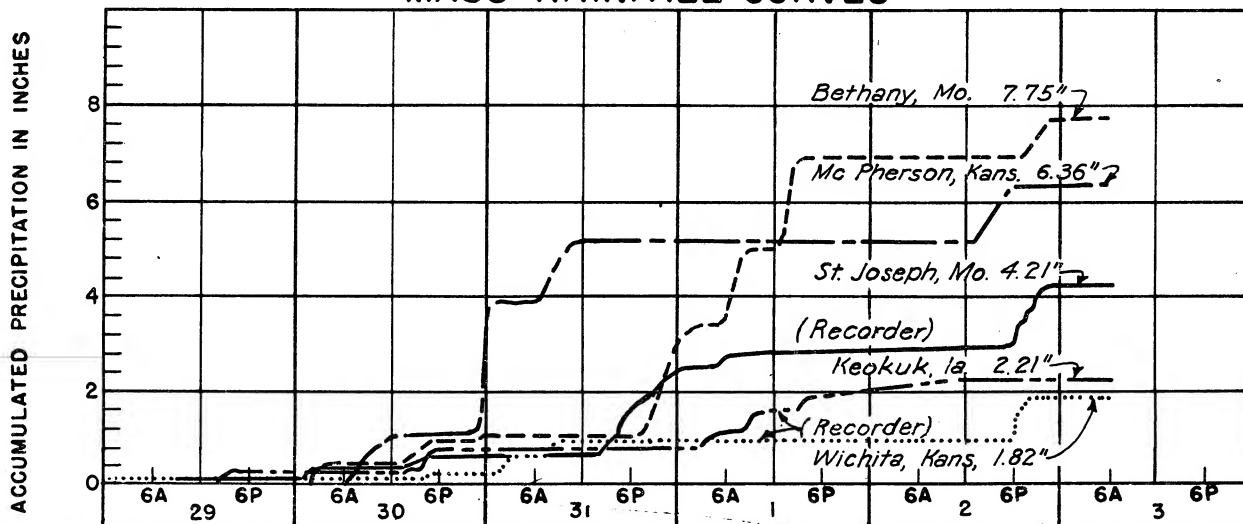
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	4.5	5.1	6.2	6.2	6.2	6.4	6.5	7.6	7.6	7.8	7.8
100	3.6	4.4	5.5	5.7	5.8	6.0	6.1	7.1	7.1	7.6	7.7
200	3.3	4.2	5.3	5.6	5.7	5.9	6.0	6.9	6.9	7.5	7.6
500	3.0	3.8	5.0	5.3	5.5	5.7	5.8	6.6	6.6	7.3	7.4
1,000	2.7	3.6	4.7	5.1	5.3	5.5	5.6	6.3	6.4	7.1	7.2
2,000	2.4	3.2	4.3	4.7	4.9	5.1	5.2	5.9	6.1	6.8	6.9
5,000	1.9	2.8	3.7	4.1	4.3	4.5	4.6	5.3	5.6	6.3	6.4
10,000	1.6	2.4	3.2	3.5	3.7	3.9	4.1	4.7	5.1	5.7	5.9
20,000	1.2	2.0	2.6	2.9	3.1	3.3	3.6	4.1	4.5	5.0	5.2
50,000	0.7	1.3	1.7	1.9	2.1	2.3	2.7	3.1	3.3	3.9	4.1
74,000	0.4	0.8	1.1	1.3	1.5	1.7	2.1	2.5	2.7	3.3	3.5

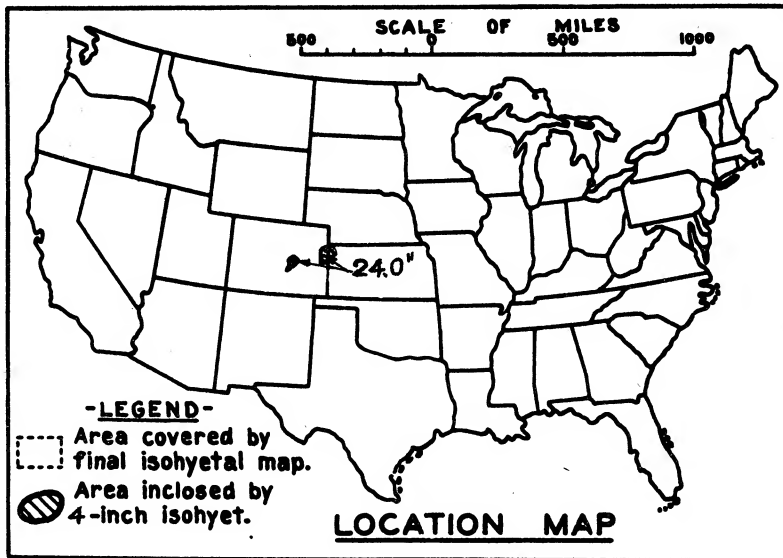
STORM STUDIES - ISOHYETAL MAP

Storm of May 29 - June 3, 1929 Assignment MR 3-25
Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 30 - 31, 1935

Assignment M R 3 - 28 A

Location Eastern Colorado

Study Prepared by:

Missouri River Division

Kansas City District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/16/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/14/45

Remarks: Centers:

N.E. of Colorado Springs, Colo.
and N.E. of Burlington, Colo.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	29
Form 5001-B (24-hour " ")-----	64
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	37
Form 5002 (Mass rainfall curves)-----	63

PART II

Final isohyetal maps, in 2 sheet, scale 1 : 1,000,000 & 1 : 500,000

Data and computation sheets:

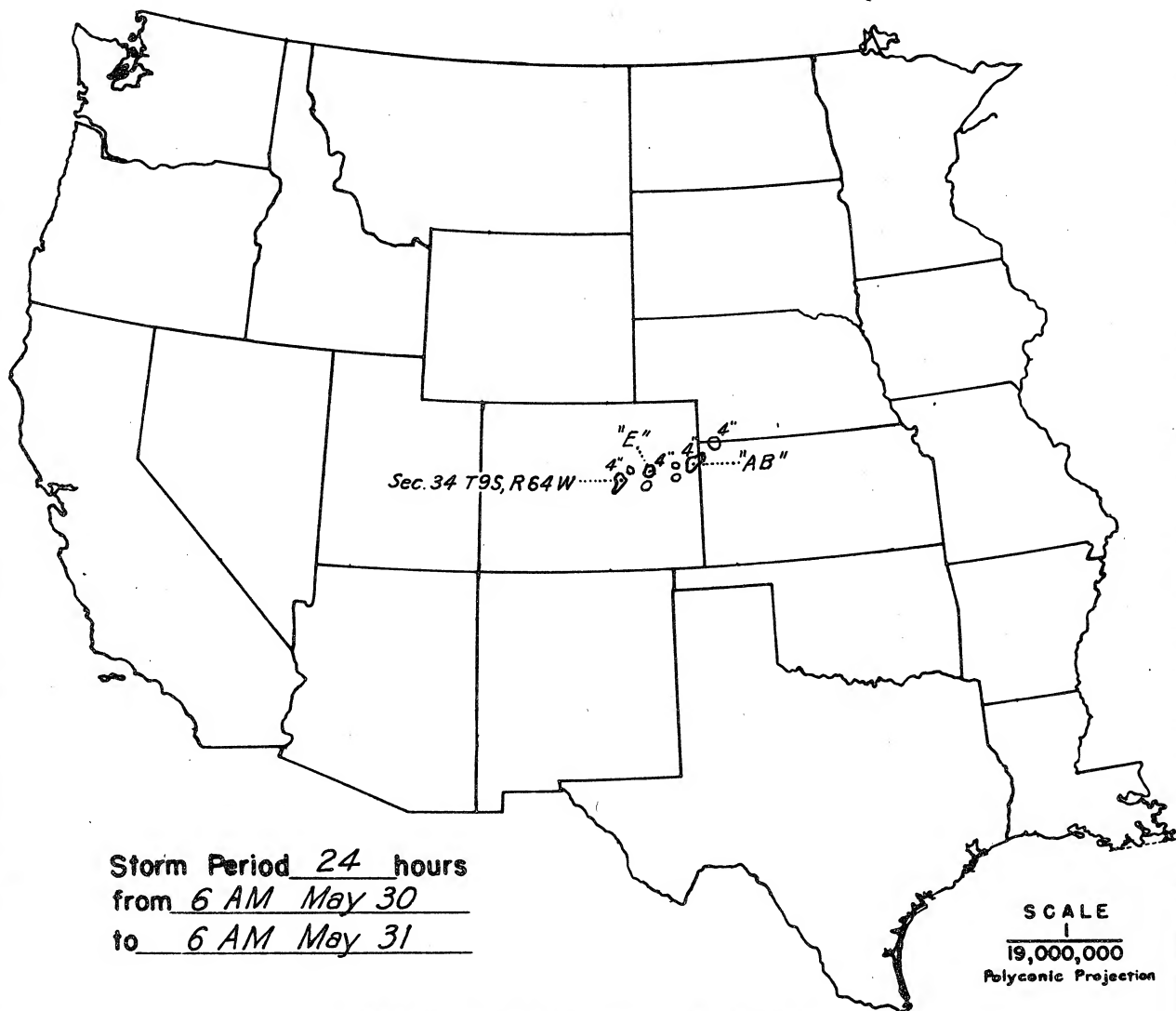
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

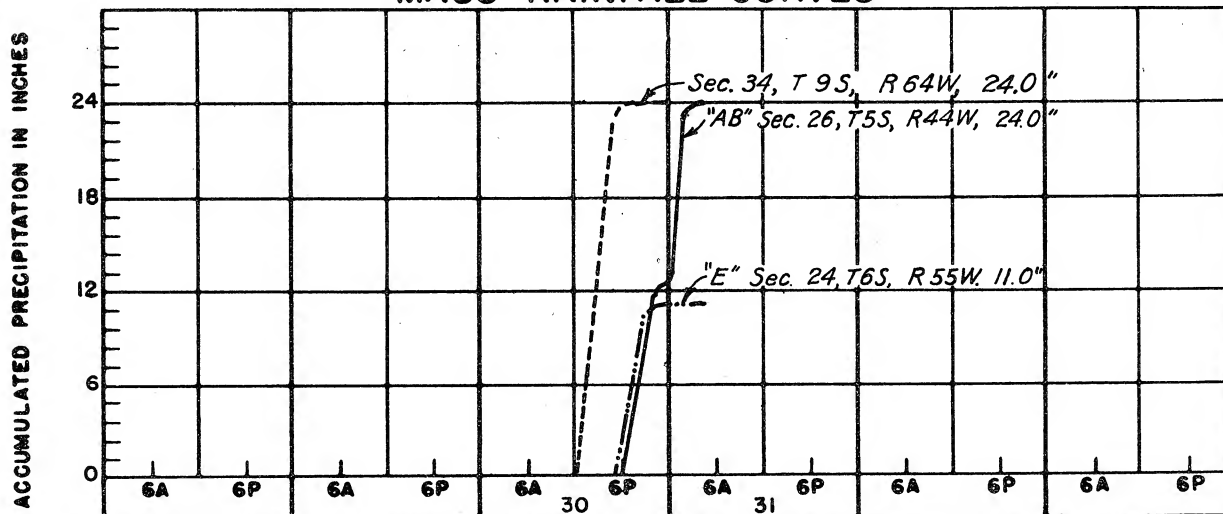
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24						
Max. Station	24.0	24.0	24.0	24.0						
5	22.1	23.3	23.3	23.3						
10	20.6	22.2	22.2	22.2						
20	18.8	20.7	20.7	20.7						
50	16.0	18.0	18.0	18.0						
100	13.7	15.4	15.4	15.4						
200	11.2	12.6	12.6	12.6						
500	7.8	9.3	9.3	9.3						
1,000	5.8	7.2	7.2	7.2						
2,000	4.1	5.3	5.5	5.5						
5,000	2.4	3.5	3.8	4.0						
6,300	2.1	3.1	3.6	3.8						

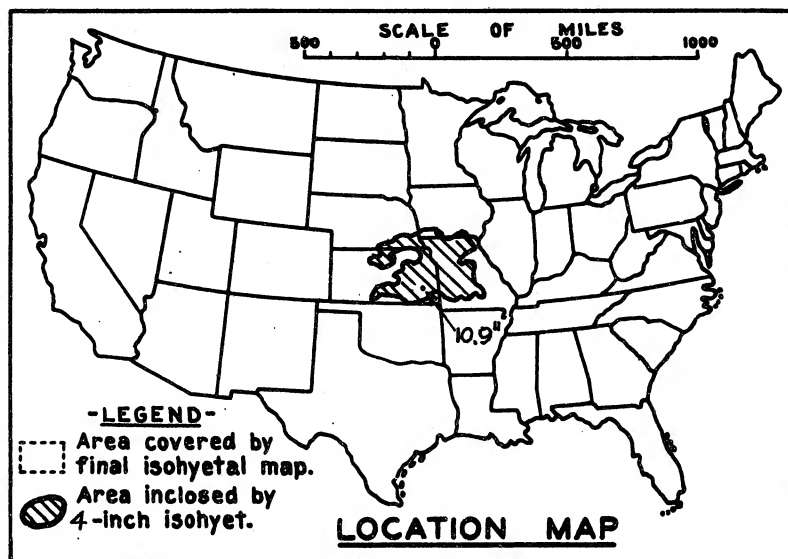
STORM STUDIES - ISOHYETAL MAP

Storm of May 30-31, 1935 Assignment MR-3-28(A)
Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 27-June 2, 1935

Assignment M R 3 - 28 B

Location Colo., Kan., Mo., Nebr.

Study Prepared by:

Missouri River Division

Kansas City District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/16/42Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/14/45

Remarks: Center at:

Chanute, Kansas.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	29
Form 5001-B (24-hour " ")-----	64
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	37
Form 5002 (Mass rainfall curves)-----	63

PART II

Final isohyetal maps, in 2 sheet, scale 1 : 1,000,000 & 1 : 500,000

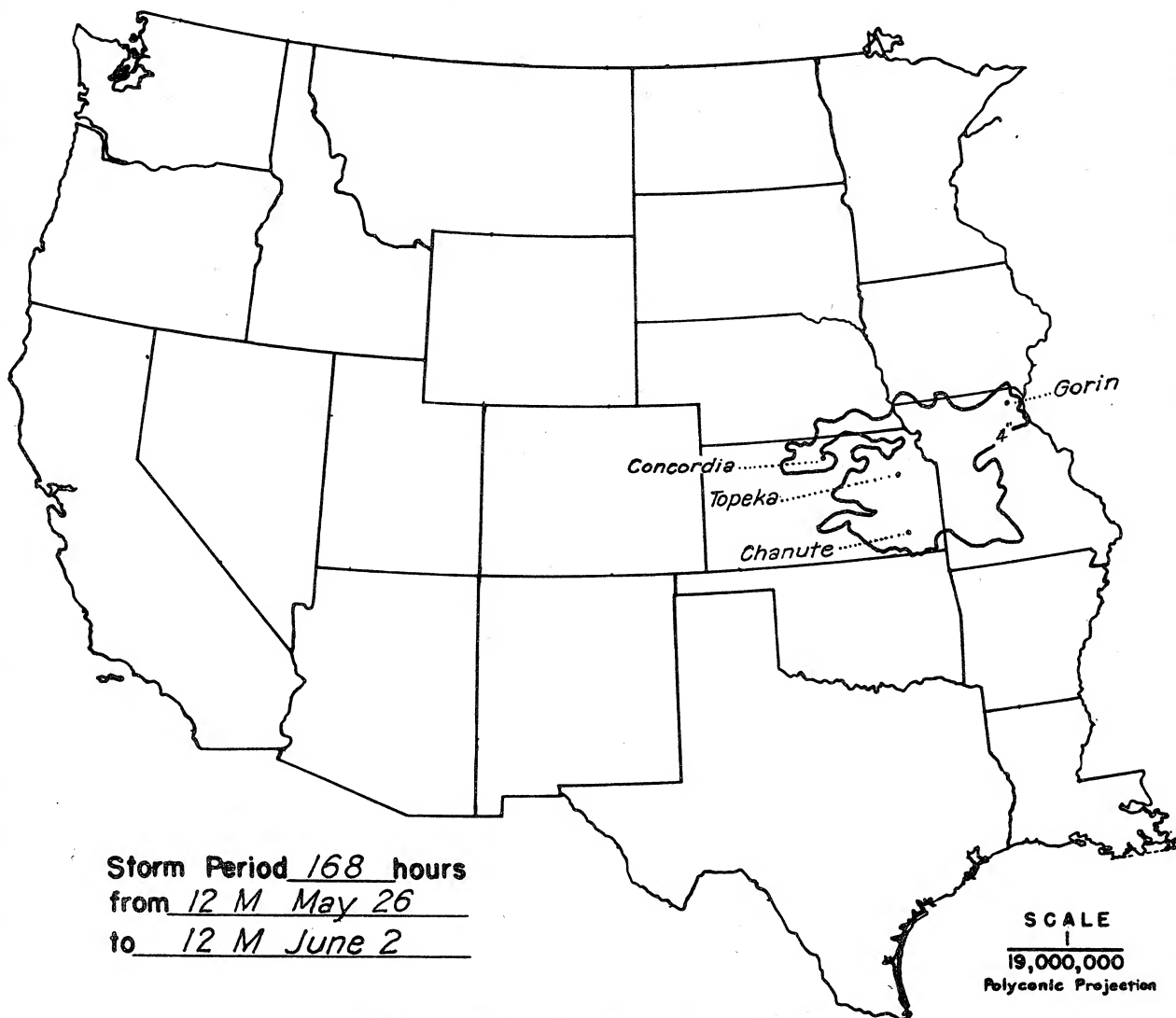
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	20
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	44
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	4

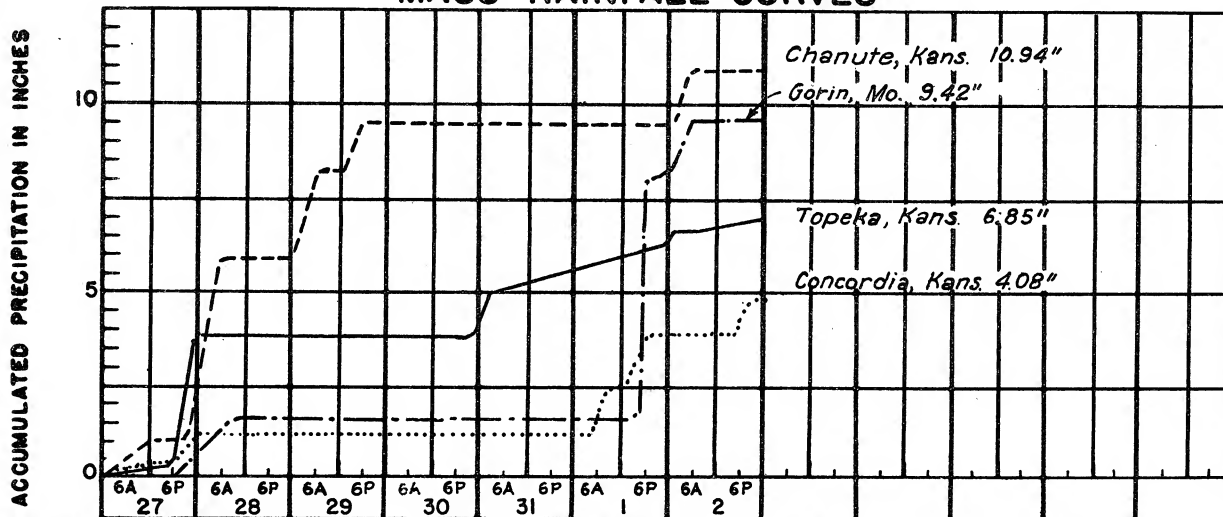
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

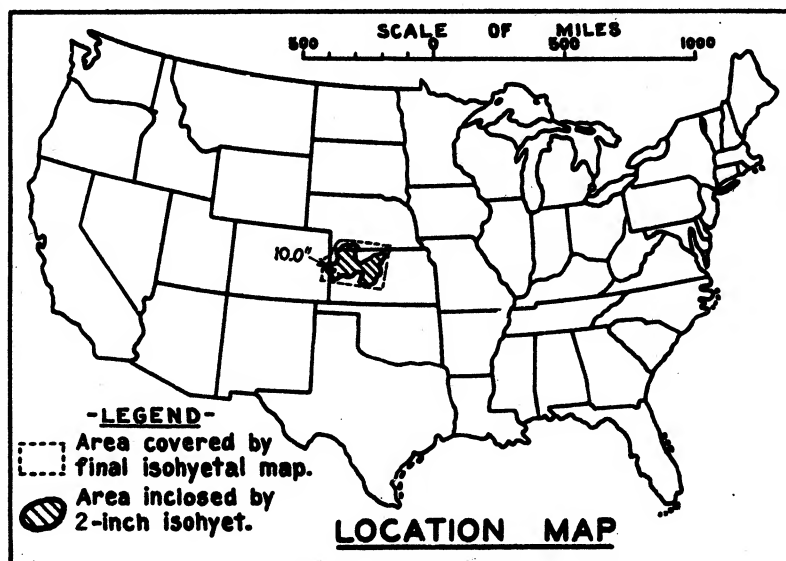
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	24	36	48	60	72	96	120	144	168
10	6.3	7.6	7.6	7.6	8.3	9.6	9.6	9.6	9.7	10.8	10.9
100	5.3	5.6	6.7	6.7	8.0	9.0	9.2	9.2	9.3	10.3	10.5
200	4.7	5.0	6.0	6.1	7.5	8.6	8.8	8.8	8.9	9.9	10.2
500	3.8	4.2	5.0	5.3	6.8	8.0	8.1	8.1	8.2	9.2	9.5
1,000	3.2	3.6	4.3	4.7	6.3	7.3	7.4	7.4	7.5	8.6	8.6
2,000	2.7	3.2	3.9	4.2	5.6	6.4	6.5	6.5	6.7	7.5	7.7
5,000	2.1	2.7	3.3	3.7	4.3	4.8	5.0	5.3	5.7	6.8	7.2
10,000	1.6	2.4	3.0	3.4	3.5	3.8	3.9	4.4	5.0	6.4	6.9
20,000	1.5	2.3	2.7	3.2	3.3	3.4	3.5	3.7	4.5	5.9	6.5
50,000	1.2	1.8	2.2	2.6	2.7	2.9	3.1	3.3	4.0	5.2	5.7

STORM STUDIES - ISOHYETAL MAP

Storm of May 27 - June 2, 1935 Assignment MR 3-28 (B)Study Prepared by: Kansas City, Mo. District
Missouri River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 30-31, 1938

Assignment MR 3 - 29

Location Western Kansas

Study Prepared by:

 Missouri River Division
 Kansas City District Office

 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/21/42

 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/22/44

 Remarks: Centers near Sharon
 Springs and Gove, Kan.
DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	8
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	6
Misc. precip. records, meteorological data, etc.....	12
Form 5002 (Mass rainfall curves).....	14

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

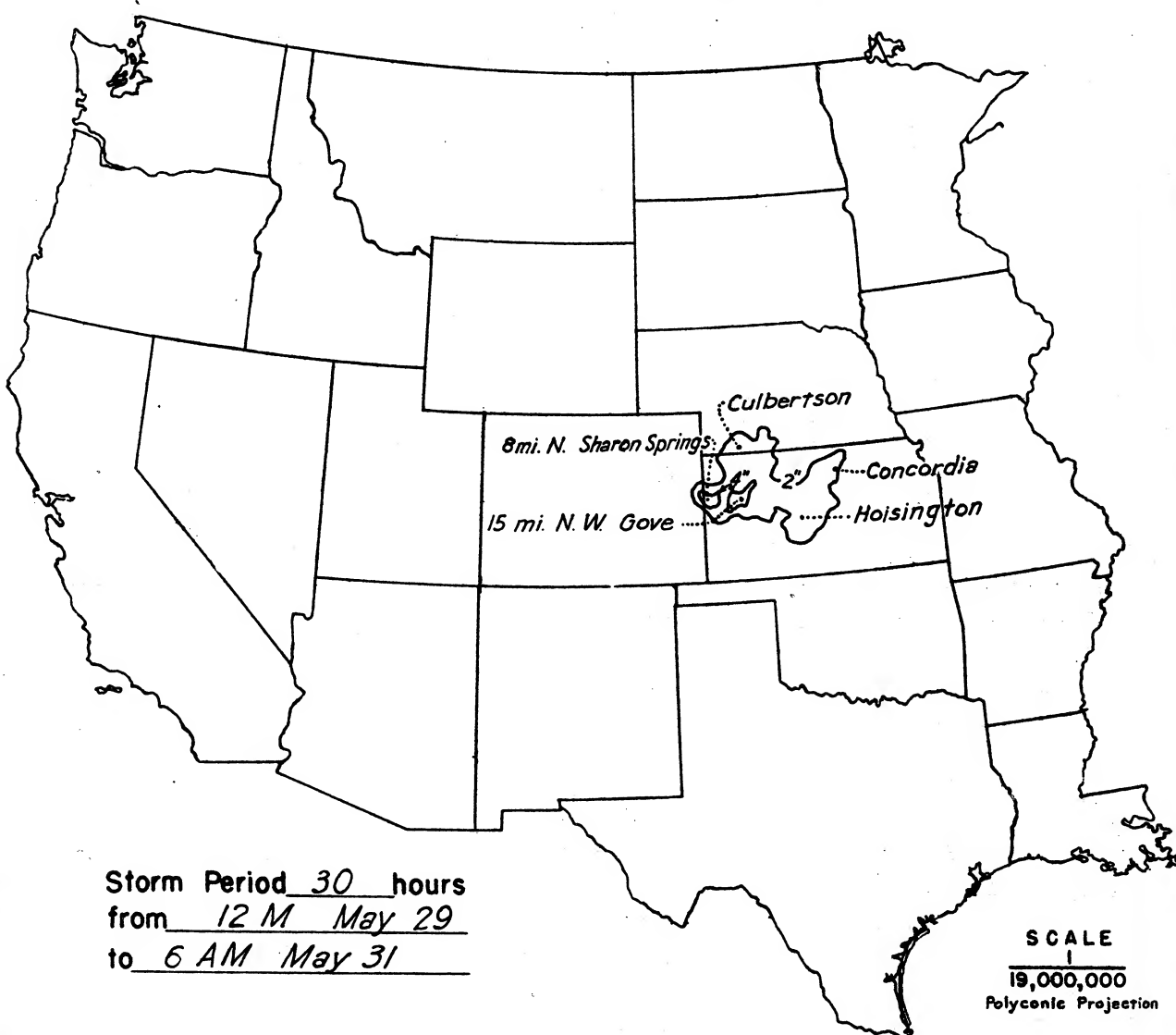
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	7
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

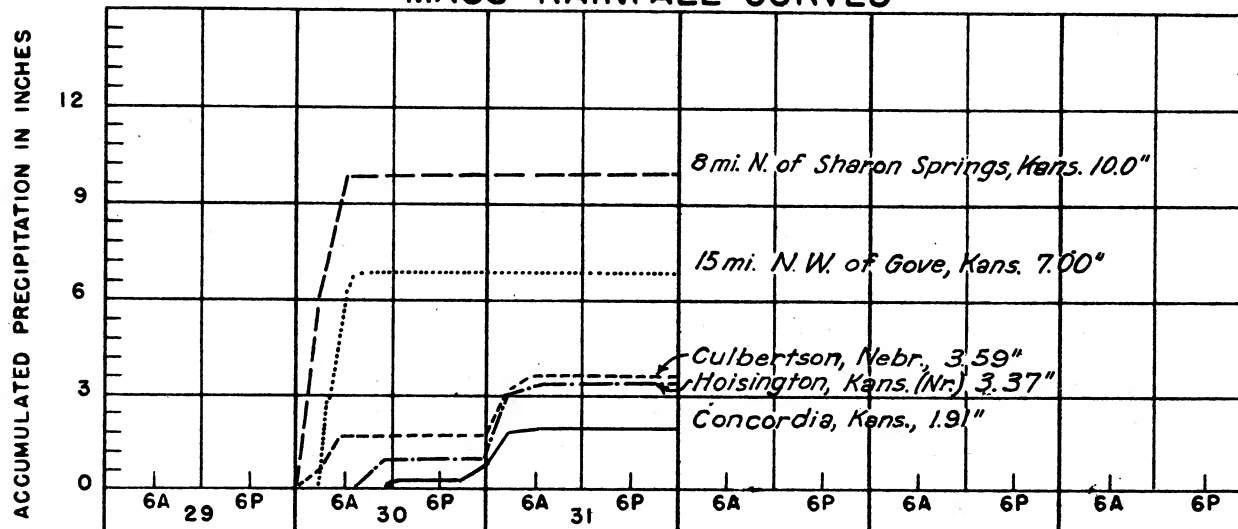
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

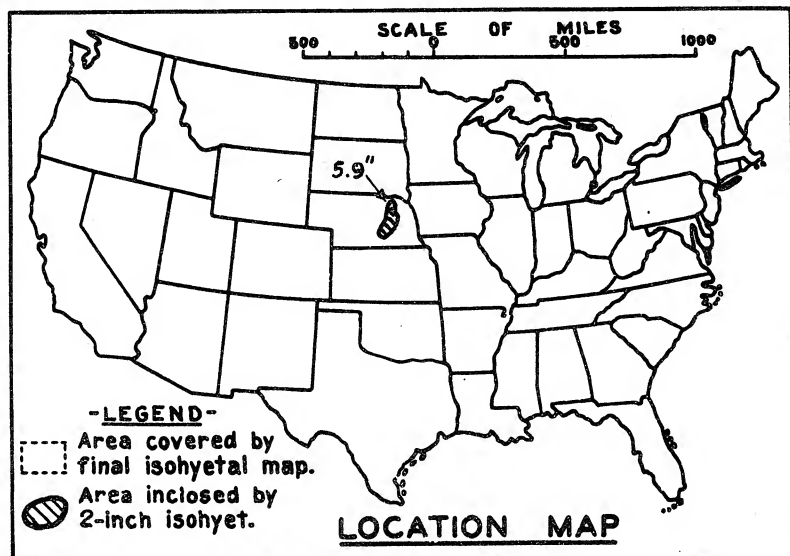
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30					
10	10.0	10.0	10.0	10.0	10.0					
100	8.8	8.8	8.8	8.8	8.8					
200	8.2	8.2	8.2	8.2	8.2					
500	7.1	7.1	7.1	7.1	7.1					
1,000	5.9	6.0	6.0	6.0	6.1					
2,000	4.6	5.0	5.0	5.0	5.2					
5,000	3.9	4.2	4.2	4.3	4.4					
10,000	2.9	3.4	3.5	3.5	3.8					
14,000	2.3	3.0	3.1	3.1	3.4					

STORM STUDIES - ISOHYETAL MAP

Storm of May 30-31, 1938 Assignment MR 3-29Study Prepared by: Kansas City, Mo. District
Missouri River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 16 - 17, 1920

Assignment M R 4 - 18

Location Eastern Nebraska

Study Prepared by:

Missouri River Division

Omaha District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 3/28/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/26/45

Remarks: Center at;

Oakdale, Nebraska

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	1
Form 5001-B (24-hour " ")	-----	-
Form 5001-D (" " " ")	-----	1
Misc. precip. records, meteorological data, etc.	-----	6
Form 5002 (Mass rainfall curves)	-----	3

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

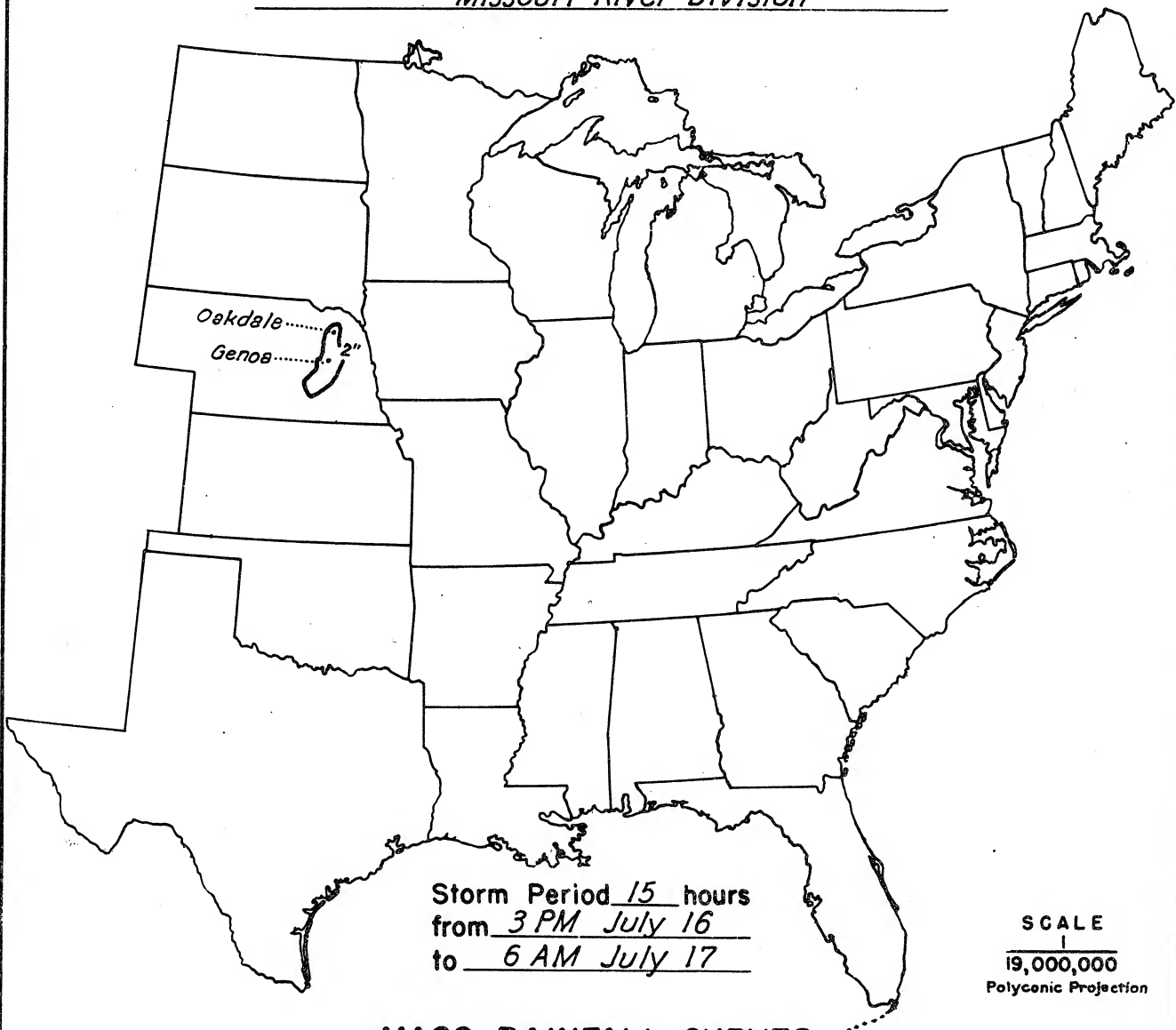
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)	-----	1
Form S-11 (Depth-area data from isohyetal map)	-----	1
Form S-12 (Maximum depth-duration data)	-----	3
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	-

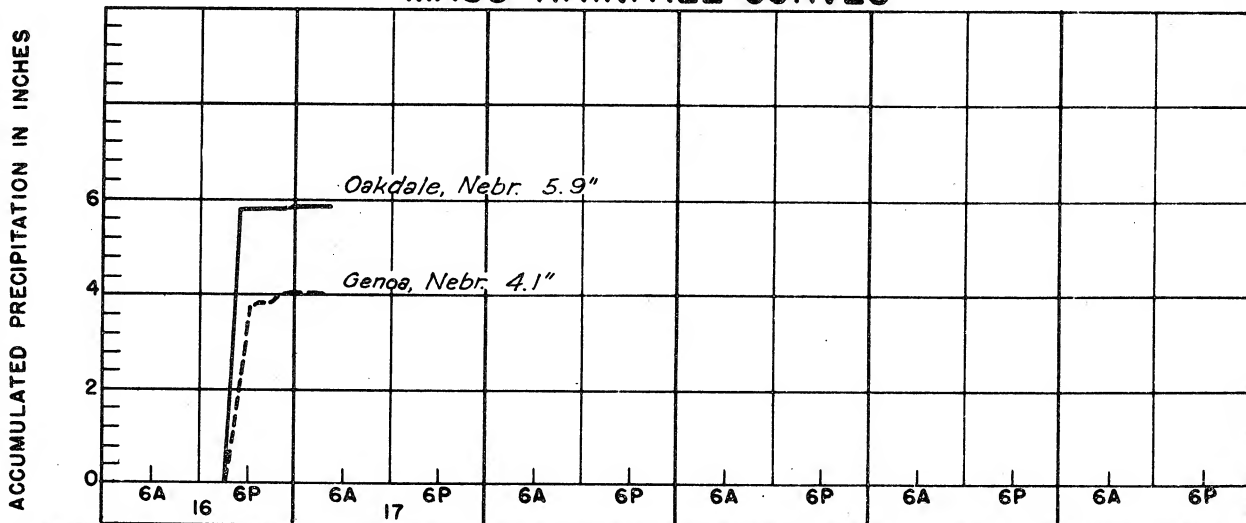
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

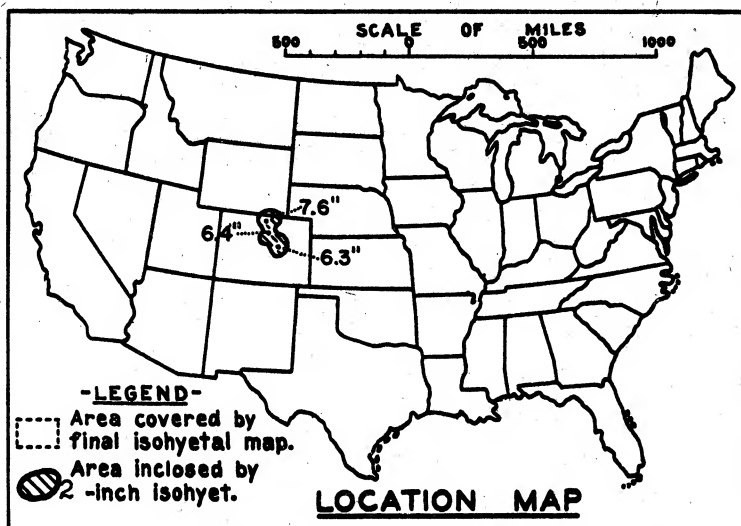
Area in Sq. Mi.	Duration of Rainfall in Hours								
	1	2	3	4	6	9	12	15	
10	5.0	5.8	5.8	5.8	5.8	5.9	5.9	5.9	
100	3.3	5.1	5.2	5.2	5.2	5.4	5.4	5.4	
200	2.7	4.4	4.5	4.6	4.8	5.2	5.2	5.2	
500	1.8	3.0	3.4	3.5	4.2	4.9	4.9	4.9	
1,000	1.2	2.0	2.4	2.6	3.6	4.6	4.6	4.6	
2,000	1.1	1.9	2.0	2.2	3.1	4.2	4.2	4.2	
3,000	1.1	1.8	2.0	2.1	2.9	3.8	3.9	3.9	
4,000	1.1	1.8	1.9	2.0	2.7	3.4	3.5	3.5	

STORM STUDIES - ISOHYETAL MAP

Storm of July 16-17, 1920 Assignment MR 4-18Study Prepared by: Omaha, Nebr. District
Missouri River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 14-16 April 1921
 Assignment MR 4-19
 Location North Central Colorado
 Study Prepared by:
 Missouri River Division
 Omaha District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 1/7/46
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 12/9/46
 Remarks: Centers at
 Fry's Ranch, Silver Lake
 and Fremont, Colorado

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	2
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	16
Form 5002 (Mass rainfall curves)-----	10

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

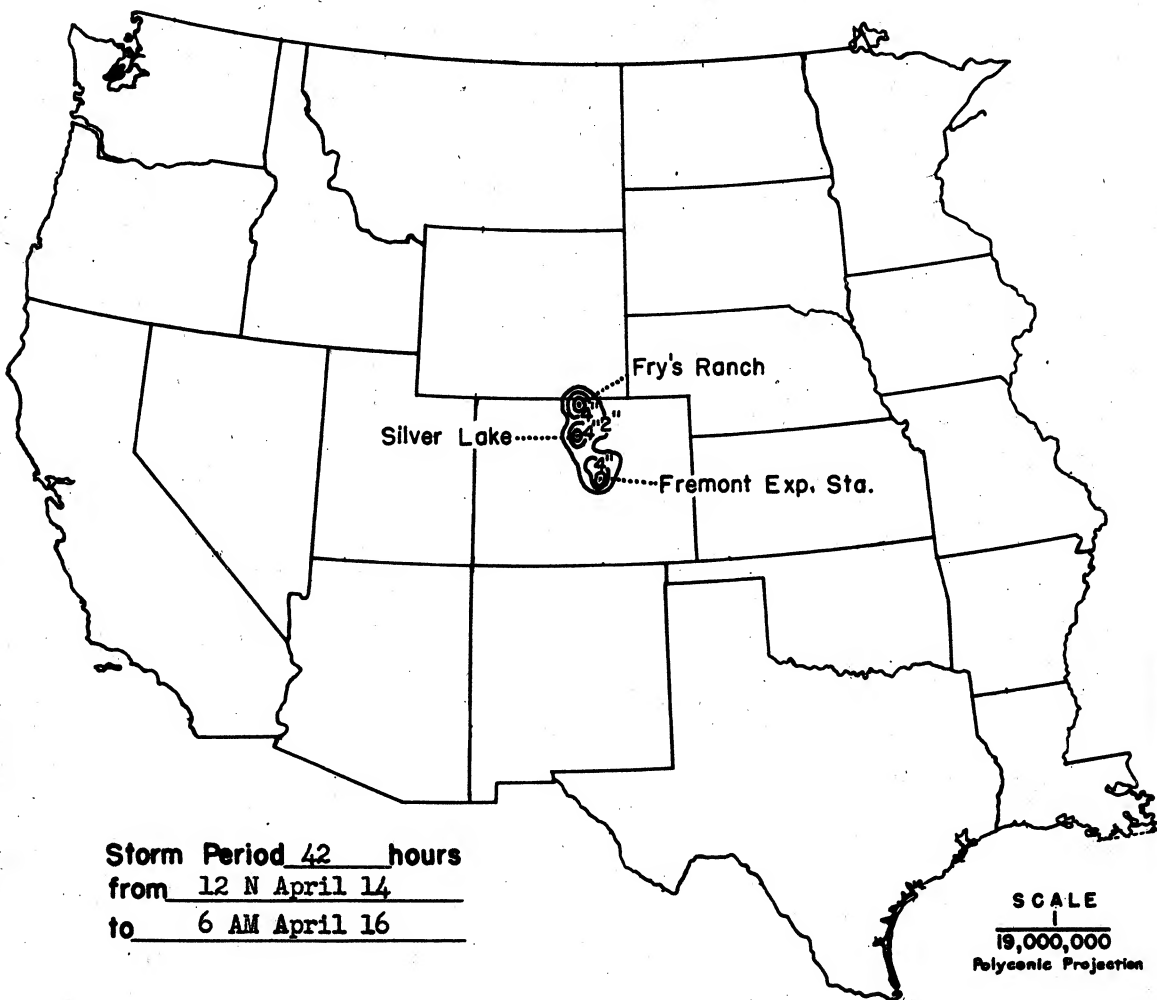
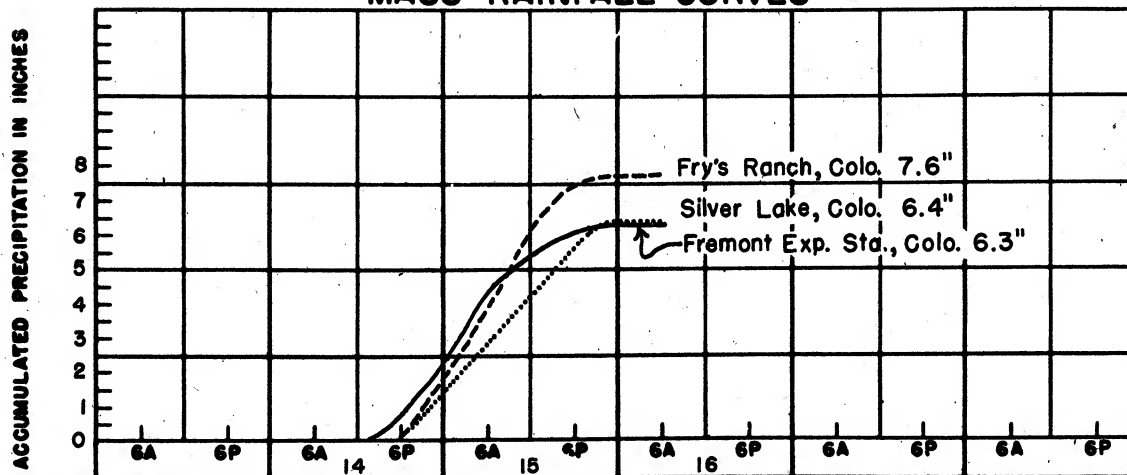
Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

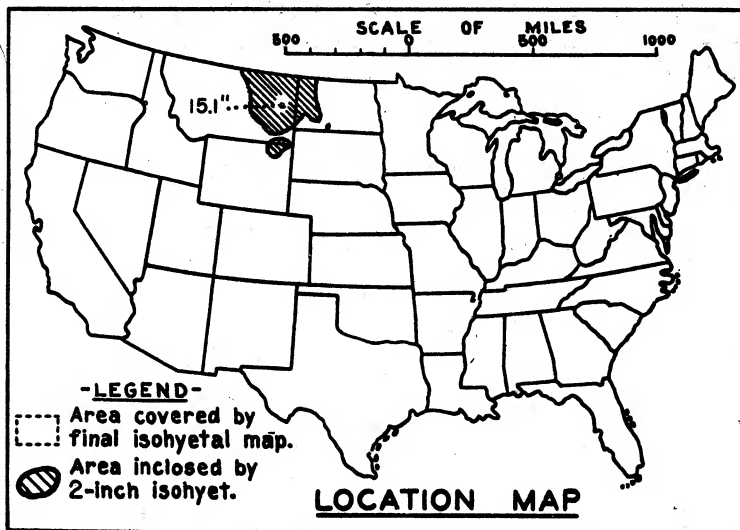
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	42					
Max. Station	2.3	4.4	6.2	7.4	7.6	7.6	7.6					
10	2.2	4.3	6.1	7.3	7.5	7.5	7.5					
100	2.1	4.2	5.7	6.9	7.1	7.2	7.2					
200	2.0	3.9	5.4	6.6	6.8	6.9	6.9					
500	1.7	3.4	4.6	5.6	5.7	5.8	5.8					
1,000	1.6	3.0	4.0	4.8	5.1	5.2	5.2					
2,000	1.4	2.6	3.4	4.2	4.3	4.4	4.4					
5,000	1.1	2.3	3.1	3.8	4.0	4.1	4.1					
9,200	1.0	1.9	2.6	3.2	3.4	3.5	3.5					

STORM STUDIES - ISOHYETAL MAP

Storm of April 14-16, 1921 Assignment MR 4-19
Study Prepared by: Omaha, Nebr. District
Missouri River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 17-21 June 1921

Assignment M R 4- 21

Location Montana, North Dakota

Study Prepared by:

Missouri River Division
Omaha District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 4/2/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/16/46Remarks: Center at
Springbrook, Montana**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 4
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 5
 Misl. precip. records, meteorological data, etc.----- 11
 Form 5002 (Mass rainfall curves)----- 11

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

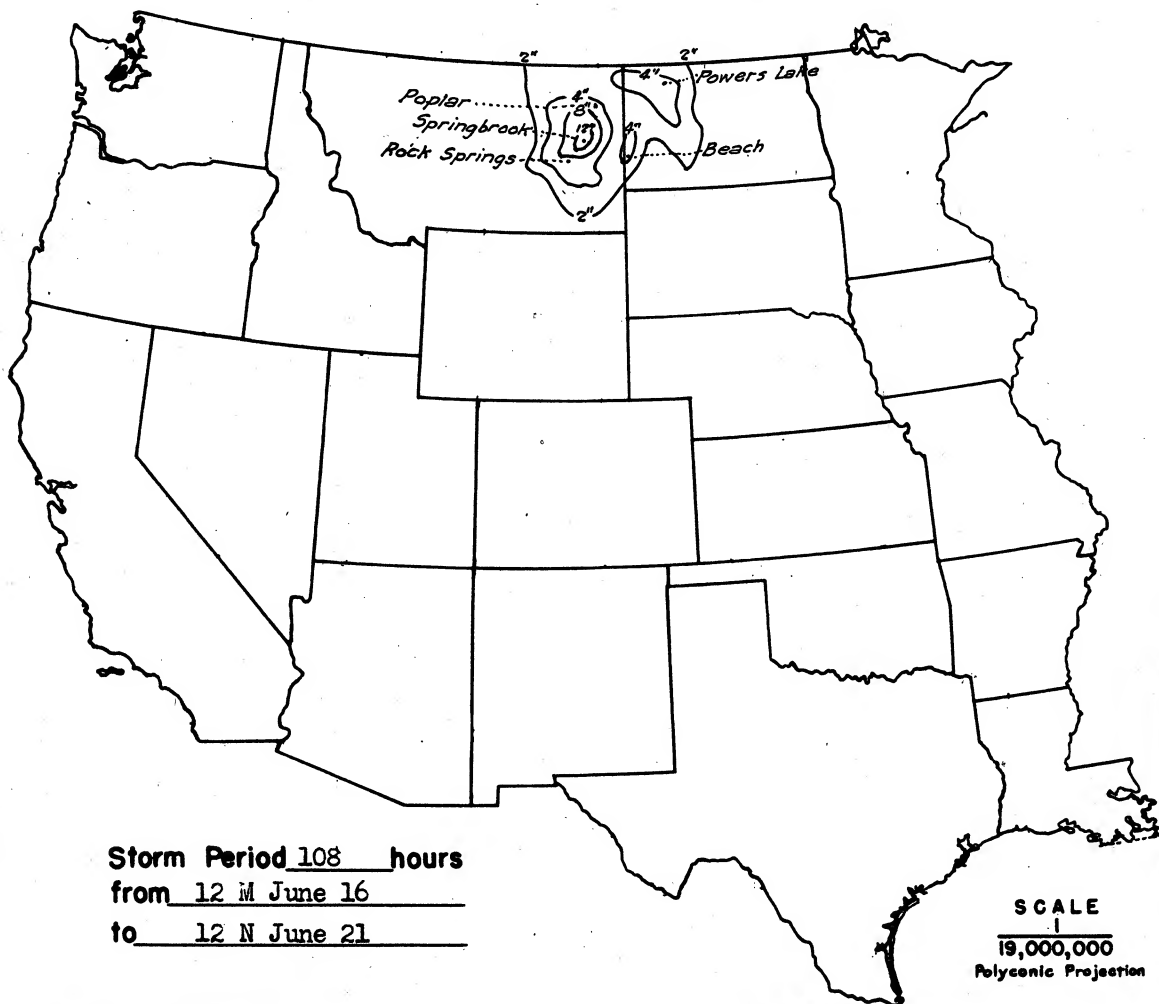
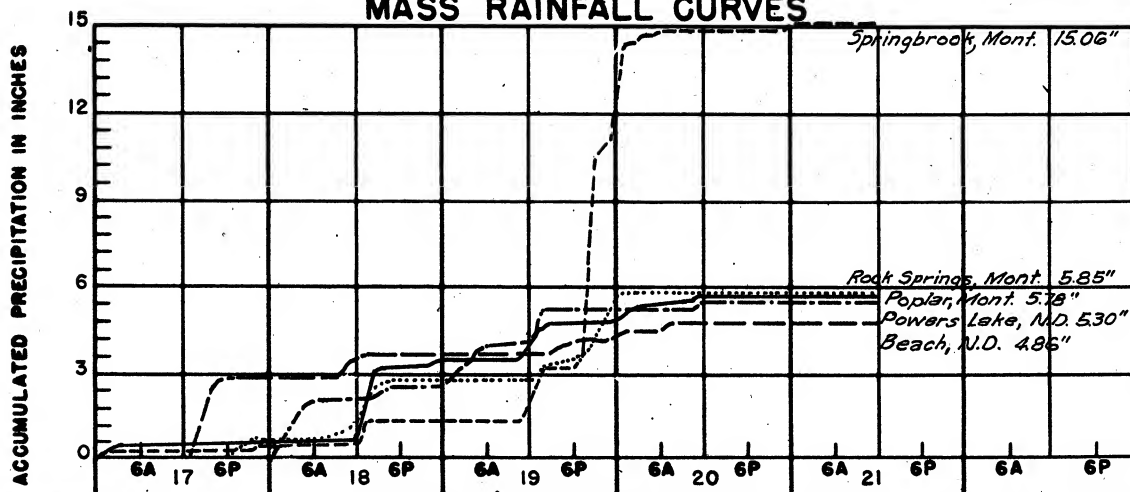
Form S-10 (Data from mass rainfall curves)----- 2
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 10
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

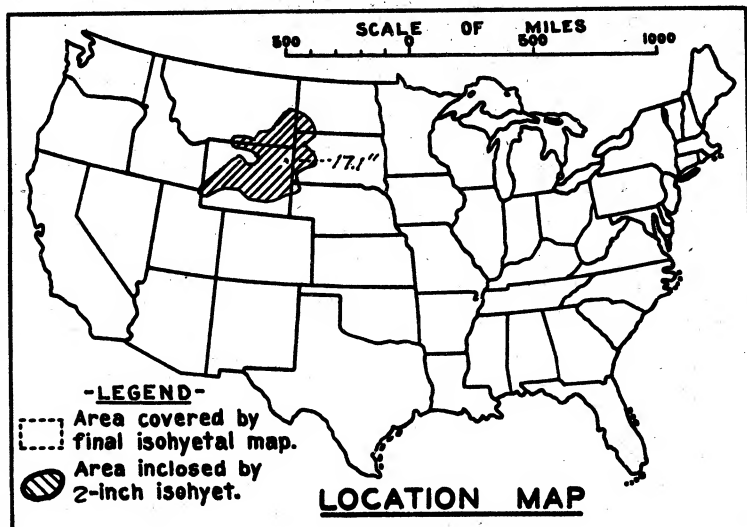
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	10.5	11.7	12.9	13.3	13.4	13.4	14.2	14.5	14.6	14.9	15.1
100	8.5	11.1	12.6	13.0	13.3	13.3	14.1	14.2	14.4	14.9	15.1
200	8.3	10.8	12.3	12.7	13.0	13.0	13.8	13.9	14.2	14.6	14.8
500	7.9	10.3	11.6	12.0	12.3	12.3	13.0	13.2	13.4	13.8	14.0
1,000	7.4	9.6	10.8	11.3	11.5	11.5	12.1	12.3	12.5	12.8	13.1
2,000	6.6	8.5	9.7	10.1	10.4	10.4	11.0	11.2	11.4	11.7	11.9
5,000	4.9	6.2	7.3	7.7	8.0	8.0	9.0	9.3	9.5	9.8	9.9
10,000	3.0	4.3	5.1	5.6	5.8	5.8	7.3	7.6	7.7	7.9	8.0
20,000	1.6	2.7	3.4	3.9	4.1	4.2	5.2	5.5	5.8	6.0	6.0
30,000	1.0	1.8	2.5	2.9	3.2	3.4	4.1	4.6	5.1	5.3	5.3
52,600	0.6	1.0	1.5	1.8	2.1	2.3	3.0	3.6	4.0	4.2	4.2

STORM STUDIES - ISOHYETAL MAP

Storm of June 17-21, 1921 Assignment MR 4-21
Study Prepared by: Omaha, Nebr. District
Missouri River Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 27 Sept.-1 Oct. 1923

Assignment MR 4-23

Location Mont., N. D., S.D., Wyo.

Study Prepared by:

Missouri River Division

Omaha District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8/21/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/15/46Remarks: Center at
Savageton, Wyoming**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	<u>9</u>
Form 5001-B (24-hour " ")-----	<u>22</u>
Form 5001-D (" " " ")-----	<u>-</u>
Misc. precip. records, meteorological data, etc.-----	<u>8</u>
Form 5002 (Mass rainfall curves)-----	<u>23</u>

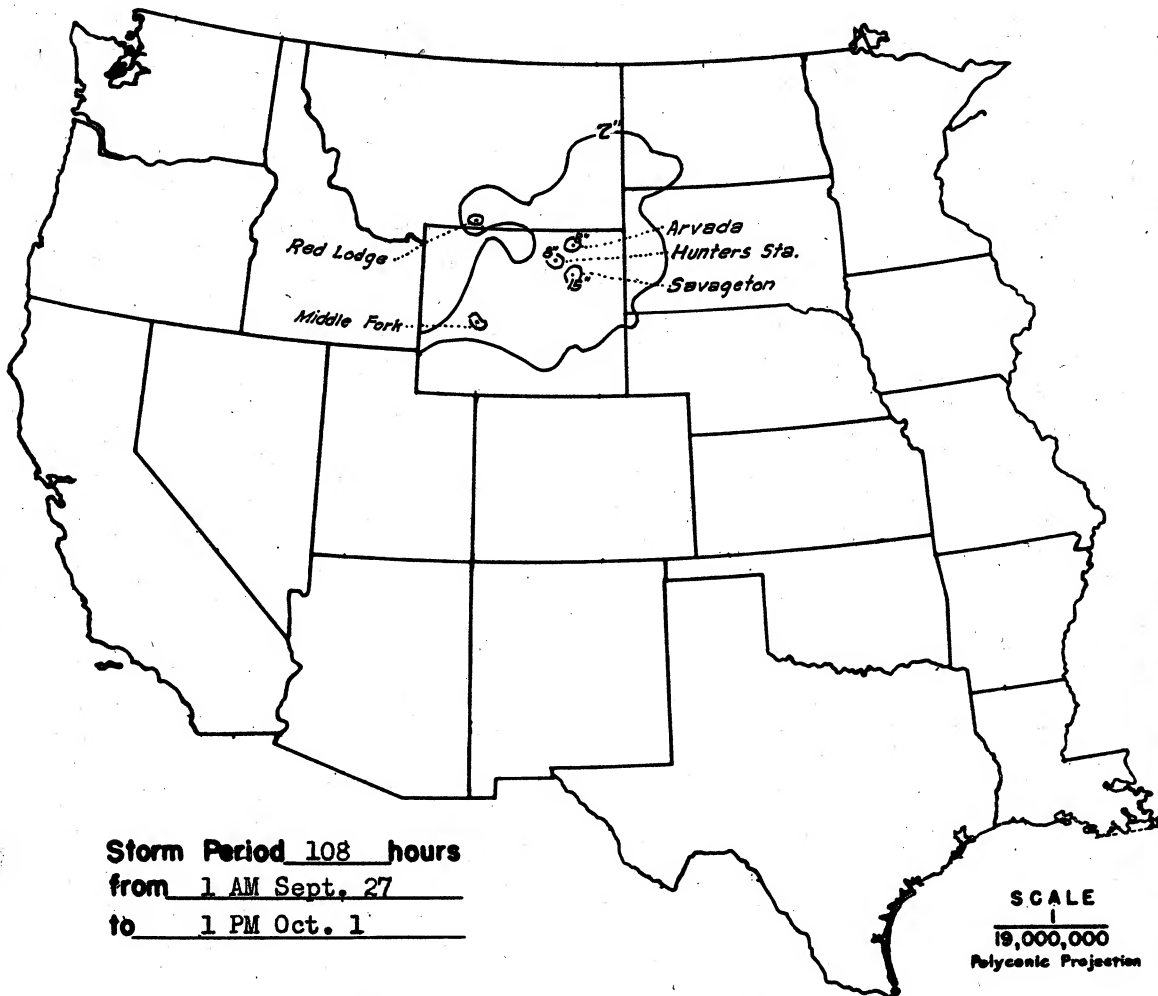
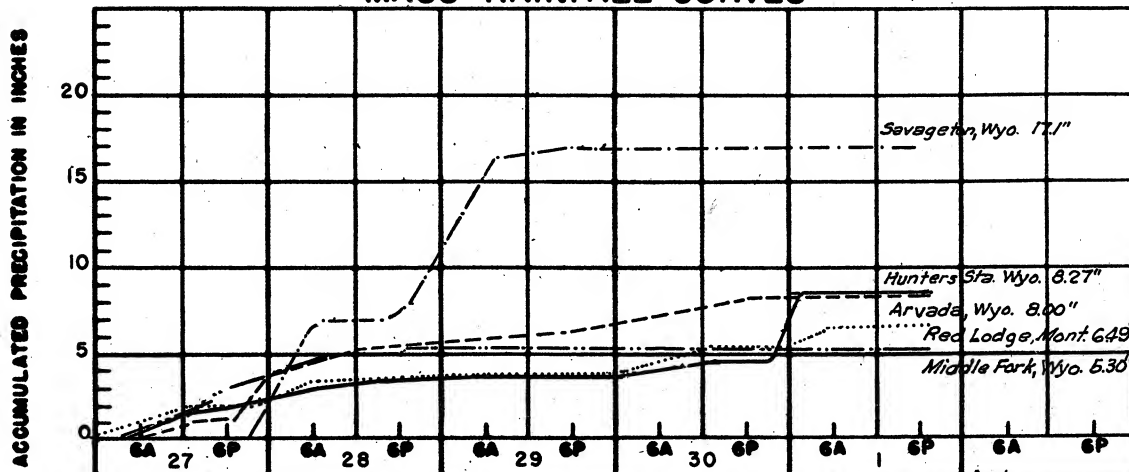
PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

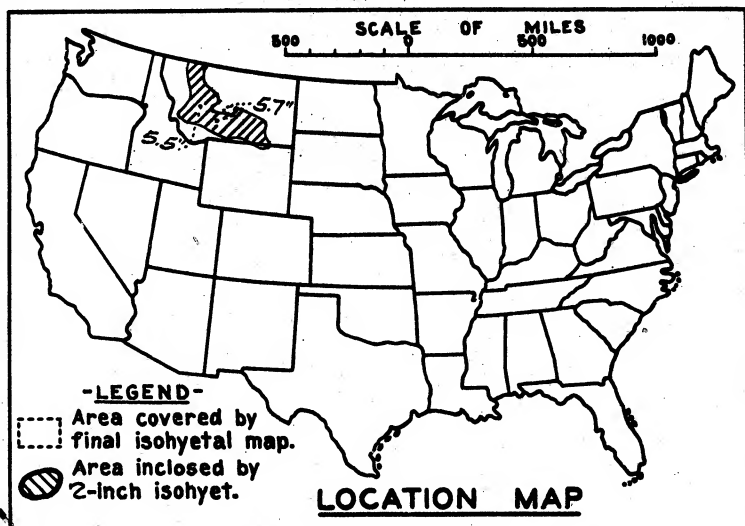
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	<u>4</u>
Form S-11 (Depth-area data from isohyetal map)-----	<u>1</u>
Form S-12 (Maximum depth-duration data)-----	<u>22</u>
Maximum duration-depth-area curves-----	<u>1</u>
Data relating to periods of maximum rainfall-----	<u>2</u>

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
Max. Station	6.8	9.3	9.5	9.7	13.6	16.7	17.1	17.1	17.1	17.1	17.1
10	6.0	9.1	9.3	9.5	13.0	16.5	16.9	16.9	16.9	16.9	16.9
100	5.1	8.4	8.7	9.0	12.2	15.5	15.9	15.9	15.9	15.9	15.9
200	4.9	8.0	8.4	8.6	11.7	14.8	15.2	15.2	15.2	15.2	15.2
500	4.3	7.1	7.5	7.7	10.4	13.2	13.4	13.6	13.7	13.7	13.7
1,000	3.7	6.2	6.4	6.6	9.0	11.4	11.6	11.7	11.8	12.0	12.0
2,000	3.0	5.0	5.3	5.5	7.5	9.5	9.7	9.8	9.9	10.1	10.1
5,000	2.2	3.6	3.8	4.0	5.6	7.0	7.2	7.4	7.6	8.1	8.2
10,000	1.6	2.5	2.7	3.0	4.2	5.3	5.7	6.1	6.3	6.9	7.0
20,000	1.2	1.8	2.1	2.5	3.2	3.9	4.7	5.1	5.5	6.0	6.0
50,000	0.8	1.5	1.8	2.1	2.7	3.1	3.7	4.0	4.3	4.7	4.8
95,000	0.6	1.1	1.4	1.7	2.1	2.3	2.8	3.1	3.3	3.7	3.8

STORM STUDIES - ISOHYETAL MAPStorm of September 27-October 1, 1923 Assignment MR 4723Study Prepared by: Omaha, Nebr. DistrictMissouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 17-20 May 1938

Assignment MR 5-6

Location Southern Montana

Study Prepared by:

Missouri River Division

Omaha District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/18/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/10/46Remarks: Centers at
Big Timber and Chessman
Res., Montana**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	<u>4</u>
Form 5001-B (24-hour " ")-----	<u>16</u>
Form 5001-D (" " " ")-----	<u>---</u>
Misc. precip. records, meteorological data, etc.-----	<u>2</u>
Form 5002 (Mass rainfall curves)-----	<u>16</u>

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

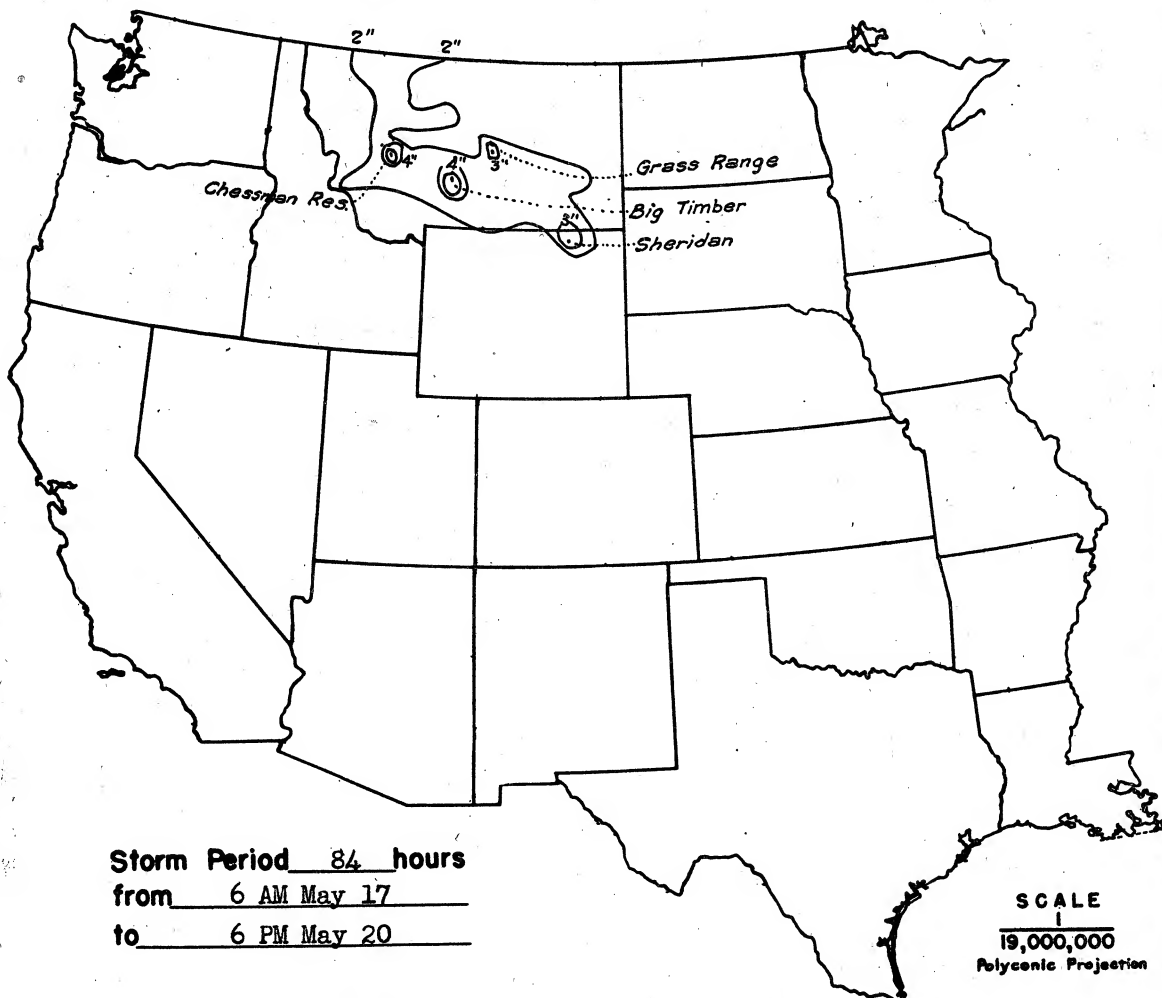
Form S-10 (Data from mass rainfall curves)-----	<u>2</u>
Form S-11 (Depth-area data from isohyetal map)-----	<u>1</u>
Form S-12 (Maximum depth-duration data)-----	<u>8</u>
Maximum duration-depth-area curves-----	<u>1</u>
Data relating to periods of maximum rainfall-----	<u>2</u>

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

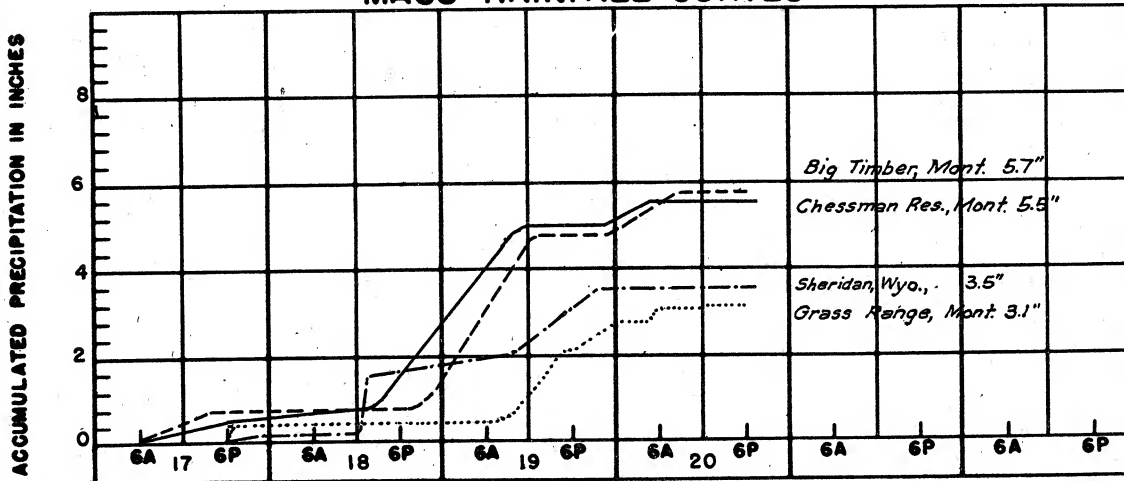
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	84	
10	2.3	3.5	3.9	4.2	4.4	4.8	4.9	5.0	5.5	5.7	
100	2.2	3.5	3.9	4.0	4.2	4.7	4.8	4.9	5.4	5.6	
200	2.1	3.5	3.8	3.9	4.1	4.6	4.7	4.8	5.2	5.5	
500	2.0	3.2	3.5	3.7	3.8	4.3	4.5	4.5	4.9	5.2	
1,000	1.7	2.9	3.2	3.4	3.6	4.0	4.2	4.2	4.6	4.9	
2,000	1.5	2.5	2.8	3.0	3.3	3.6	3.8	4.0	4.2	4.5	
5,000	1.1	1.9	2.3	2.6	2.8	3.2	3.4	3.6	3.8	4.0	
10,000	0.9	1.4	1.9	2.2	2.4	2.8	3.1	3.2	3.4	3.6	
20,000	0.6	1.1	1.5	1.8	2.1	2.4	2.7	2.8	3.0	3.1	
30,000	0.5	1.0	1.3	1.6	1.9	2.2	2.5	2.6	2.8	3.0	
50,000	0.4	0.8	1.2	1.5	1.7	1.9	2.2	2.5	2.8	2.9	

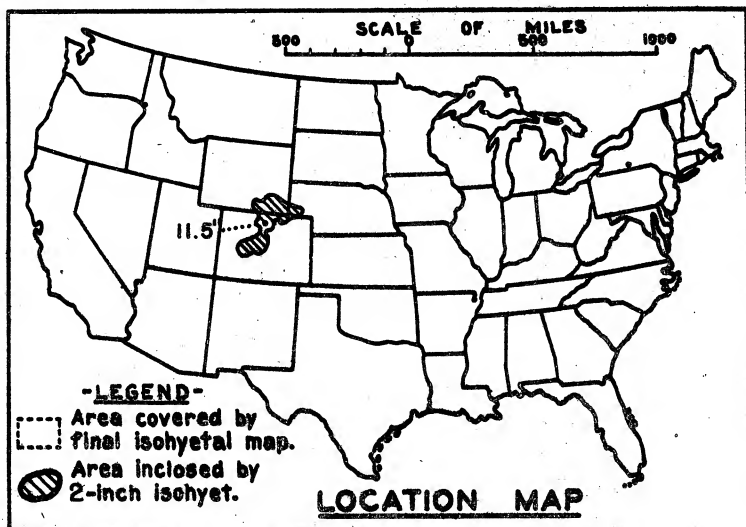
STORM STUDIES - ISOHYETAL MAP

Storm of May 17-20, 1938 Assignment MR 5-6
Study Prepared by: Omaha, Nebr. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 30 Aug.-4 Sept. 1938

Assignment MR 5-8

Location Colo. - Wyo.

Study Prepared by:

Missouri River Division

Omaha District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 4-14-44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/6/46Remarks: Center near
Loveland, Colo. (Smith Ranch)**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " " " ")-----	28
Form 5001-D (" " " " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	42
Form 5002 (Mass rainfall curves)-----	34

PART II

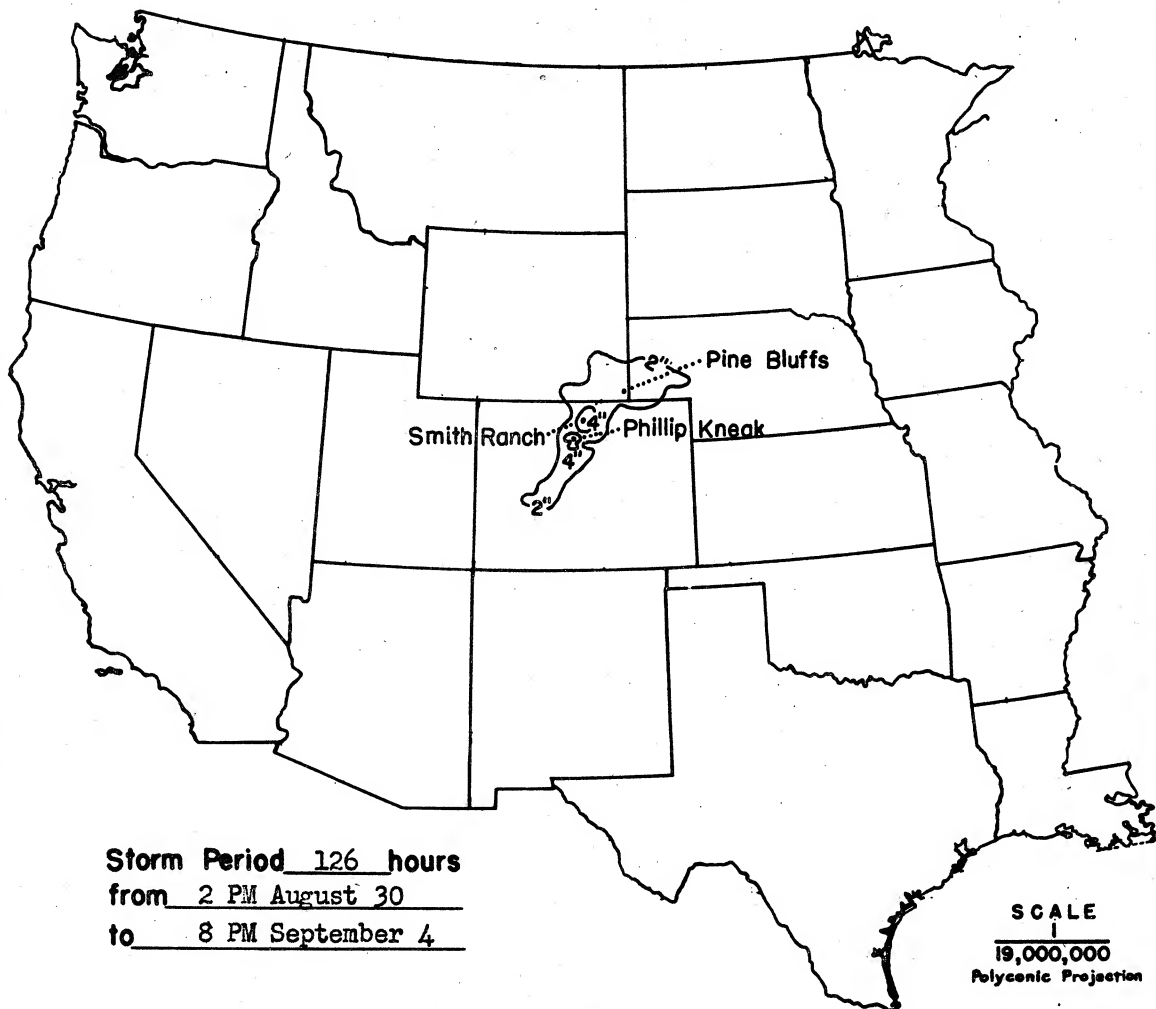
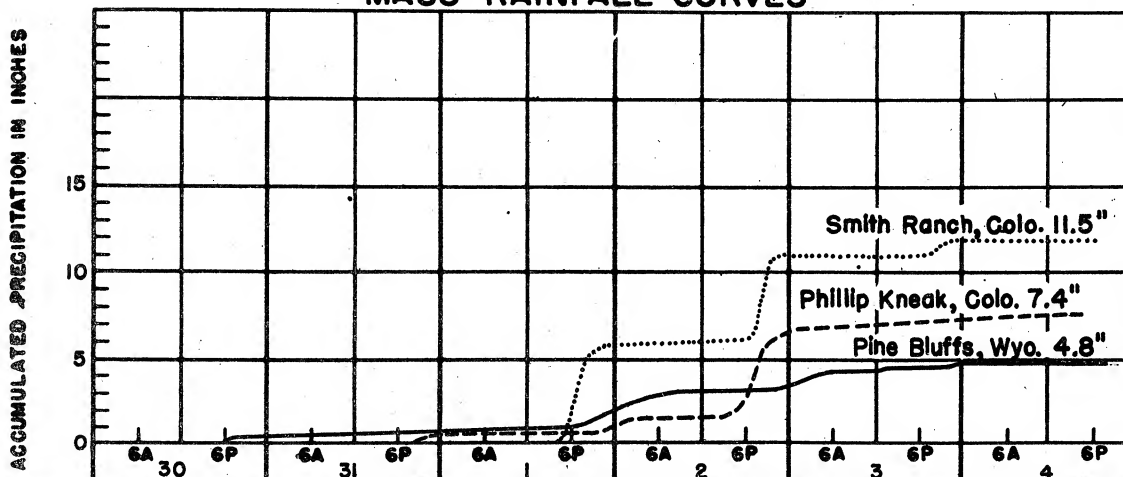
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

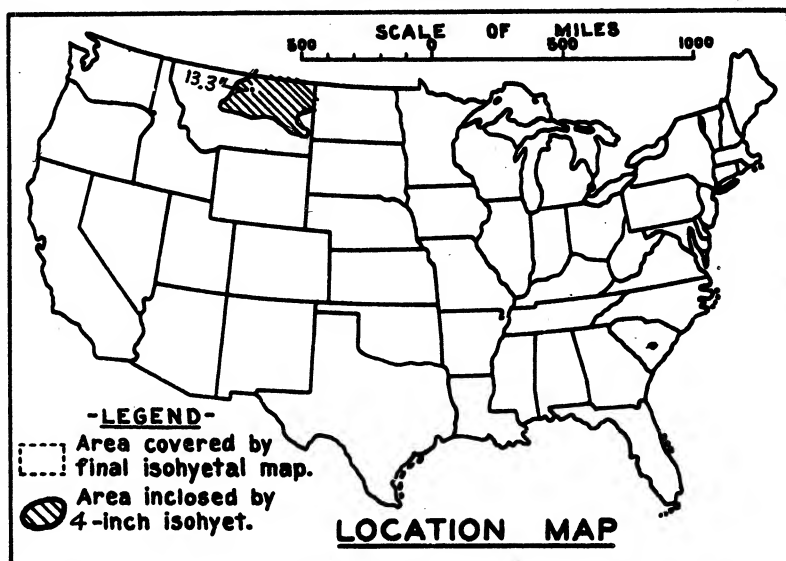
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	14
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
Max. Station	6.9	7.3	7.4	7.4	10.8	10.8	10.8	11.5	11.5	11.5	11.5
10	6.4	6.8	7.0	7.0	9.4	9.9	9.9	10.6	10.6	10.6	10.6
100	4.4	4.8	5.2	5.2	8.3	8.9	8.9	9.4	9.4	9.4	9.4
200	3.6	4.2	4.6	4.6	7.0	7.8	7.9	8.4	8.4	8.4	8.4
500	2.3	3.1	3.1	3.4	4.8	6.1	6.2	6.6	6.7	6.7	6.8
1,000	1.6	2.9	2.9	3.1	3.7	5.0	5.1	5.4	5.7	5.7	5.8
2,000	1.3	2.4	2.5	2.7	3.0	4.0	4.1	4.4	4.6	4.6	4.8
5,000	1.0	1.6	1.7	2.1	2.7	3.2	3.4	3.6	3.8	4.0	4.1
10,000	0.9	1.5	1.6	1.9	2.5	2.8	3.1	3.3	3.5	3.6	3.8
20,000	0.7	1.1	1.3	1.6	2.0	2.2	2.6	2.7	2.8	3.1	3.2
21,500	0.7	1.1	1.3	1.6	2.0	2.2	2.6	2.7	2.8	3.0	3.1

STORM STUDIES - ISOHYETAL MAPStorm of August 30-September 4, 1938 Assignment MR 5-8Study Prepared by: Omaha, Nebr. District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of June 6 - 8, 1906

Assignment MR 5 - 13

Location Northern Montana

Study Prepared by:

Missouri River Division
Fort Peck District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 1/12/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/23/45

Remarks: Center at

Warrick, Mont.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 2

Form 5001-B (24-hour " ")----- 7

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 7

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 2

Form S-11 (Depth-area data from isohyetal map)----- 1

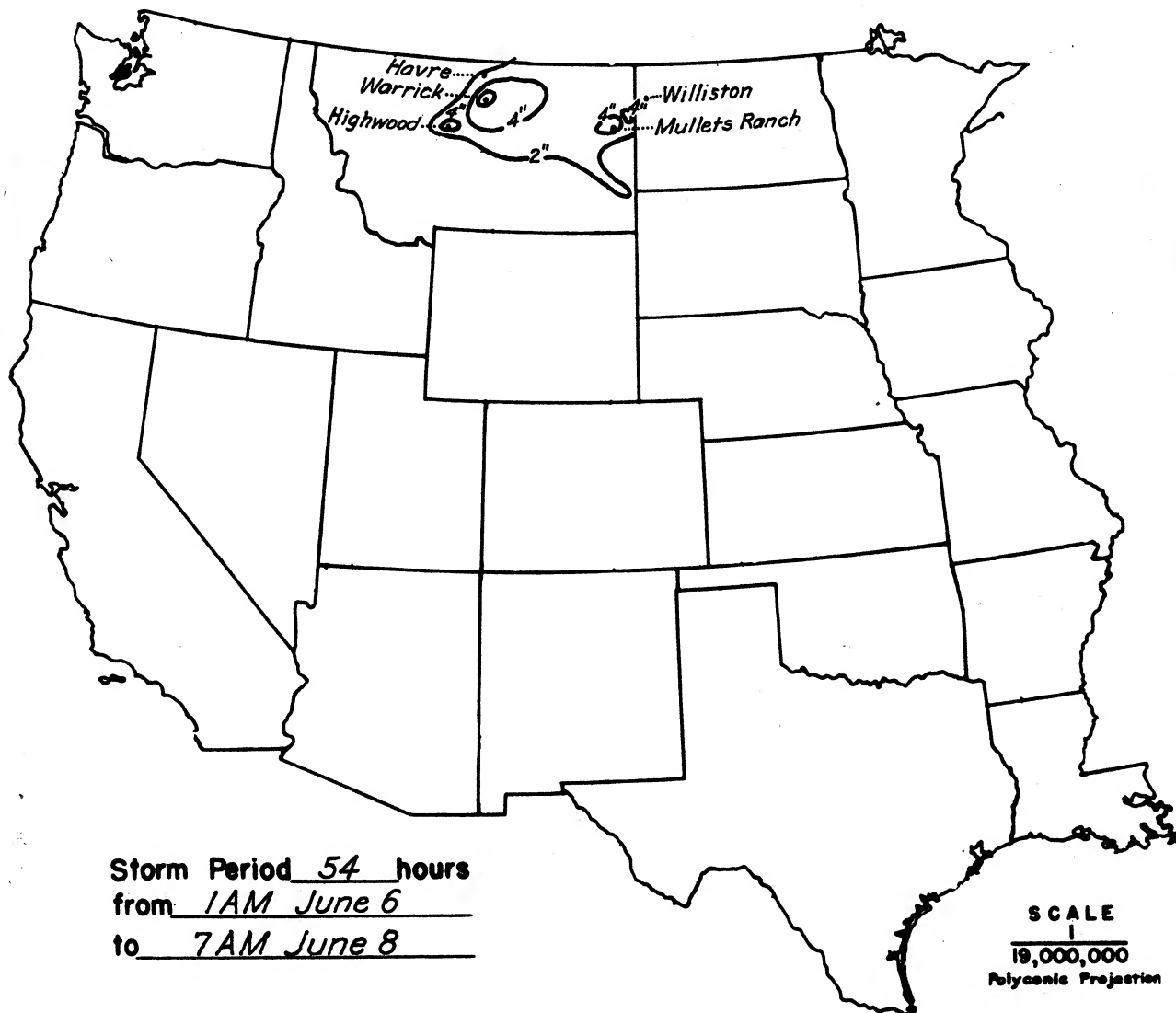
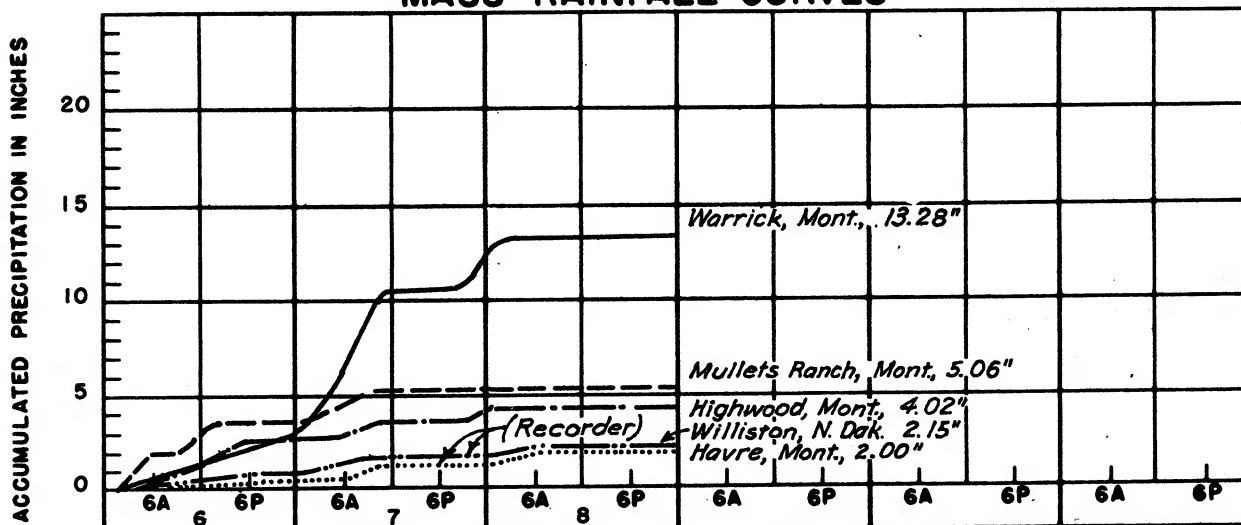
Form S-12 (Maximum depth-duration data)----- 7

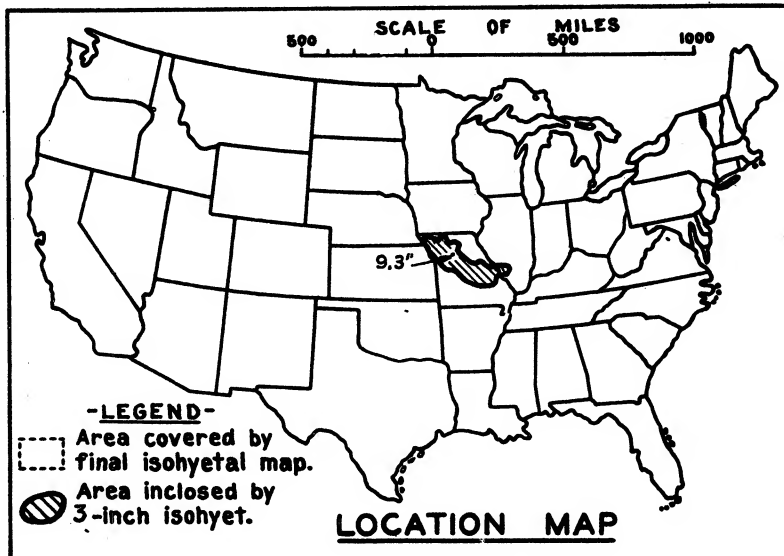
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	54		
10	6.0	7.8	8.4	10.2	10.9	11.6	13.1	13.3		
100	5.0	7.1	7.6	9.2	9.7	10.5	11.8	12.2		
200	4.6	6.6	7.1	8.7	9.2	9.9	11.2	11.5		
500	4.0	5.9	6.3	7.8	8.2	8.8	10.0	10.3		
1,000	3.5	5.0	5.4	6.7	7.1	7.6	8.7	8.9		
2,000	2.9	4.0	4.2	5.4	5.7	6.1	7.1	7.3		
5,000	2.1	3.0	3.2	4.2	4.4	4.9	5.7	5.9		
10,000	1.7	2.5	2.7	3.4	3.8	4.2	5.0	5.2		
20,000	1.5	2.2	2.5	2.9	3.5	3.7	4.2	4.3		
30,000	1.3	1.9	2.1	2.6	3.2	3.4	3.8	4.0		
40,000	1.2	1.7	1.8	2.1	2.6	3.0	3.3	3.6		

STORM STUDIES - ISOHYETAL MAPStorm of June 6-8, 1906 Assignment MR 5-13Study Prepared by: Fort Peck, Mont. District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of June 23-26, 1942
 Assignment MR 6-1
 Location Ill. & Mo.
 Study Prepared by:
 Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/27/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/23/44

Remarks: Center at

Clifton Hill, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	44
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	11
Misc. precip. records, meteorological data, etc.-----	Storm Supplement
Form 5002 (Mass rainfall curves)-----	27

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

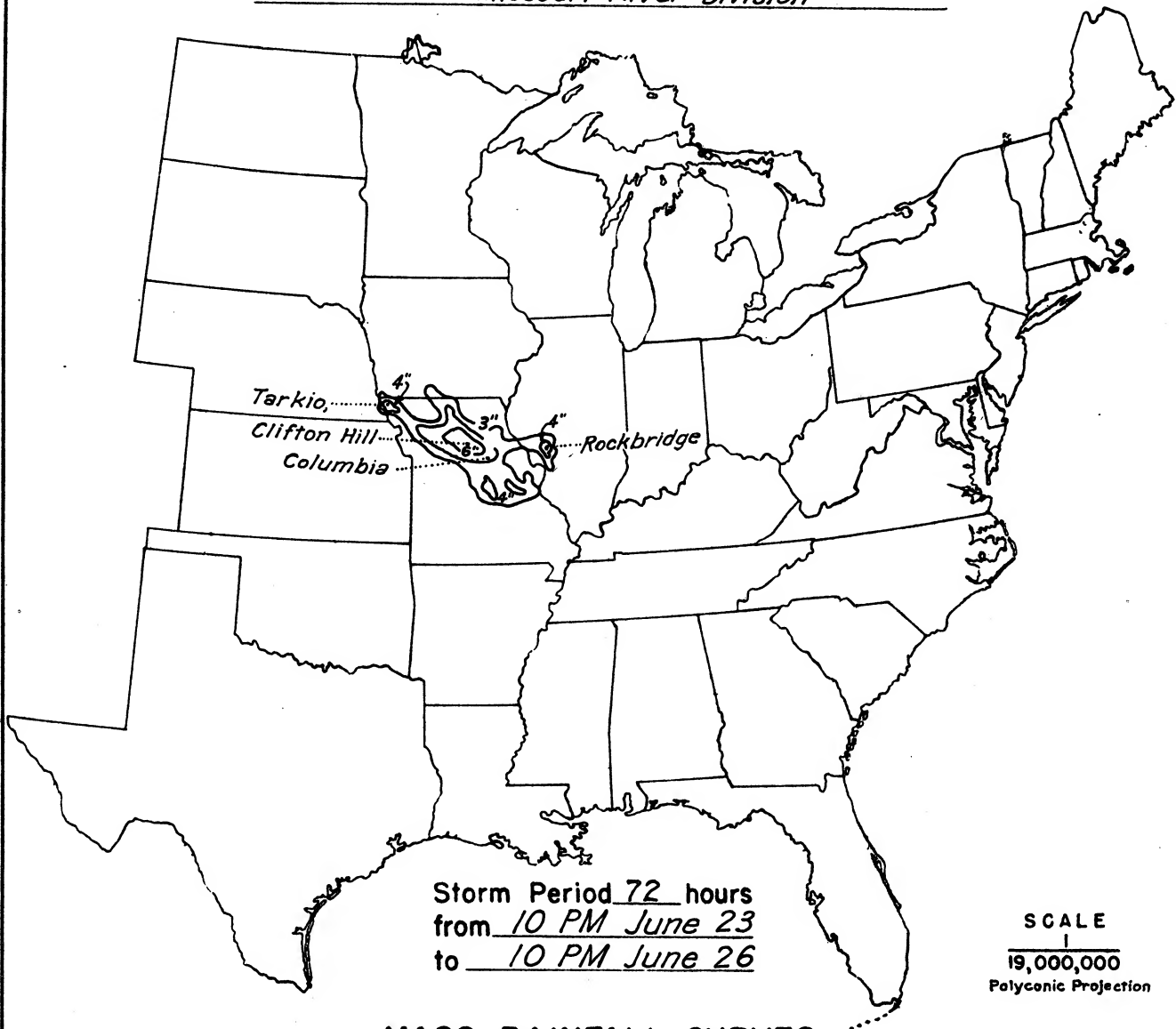
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

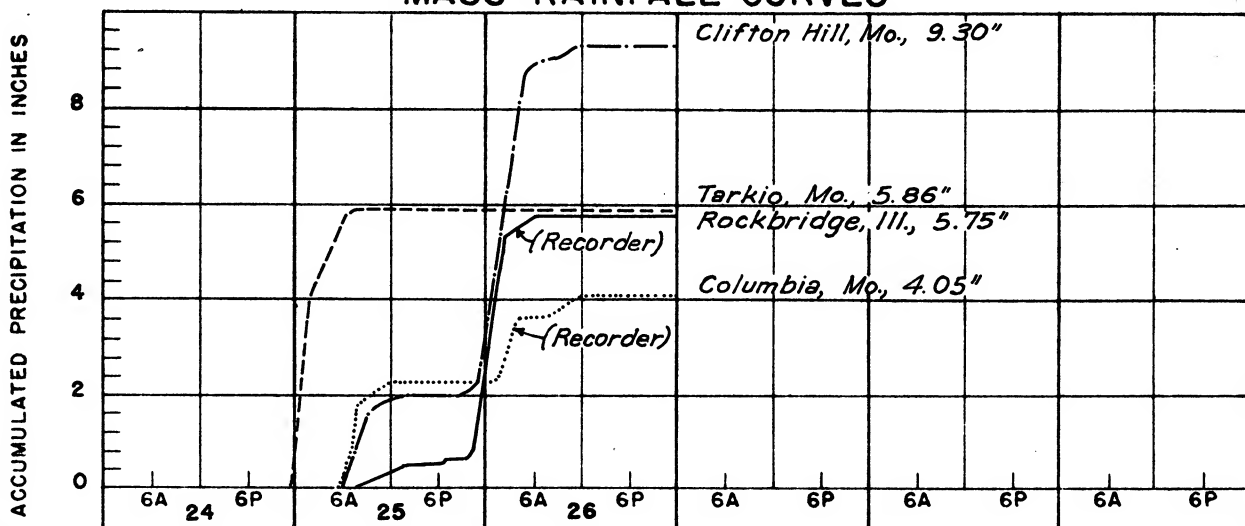
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	6.8	7.2	7.3	8.9	9.3	9.3	9.3	9.3	9.3	
100	6.5	6.9	7.0	8.4	8.8	8.9	8.9	8.9	8.9	
200	6.3	6.7	6.8	8.1	8.5	8.6	8.6	8.6	8.6	
500	5.6	5.9	6.0	7.5	7.9	8.0	8.0	8.0	8.0	
1,000	4.7	5.0	5.2	6.9	7.3	7.5	7.5	7.5	7.5	
2,000	3.8	4.1	4.5	6.1	6.7	6.8	6.8	6.8	6.8	
5,000	2.7	3.1	3.5	4.9	5.6	5.9	5.9	5.9	5.9	
10,000	2.0	2.6	2.8	4.1	4.7	5.1	5.1	5.1	5.1	
20,000	1.4	2.1	2.2	3.2	3.8	4.3	4.3	4.3	4.3	
35,000	1.1	1.6	1.7	2.5	3.0	3.4	3.5	3.5	3.5	

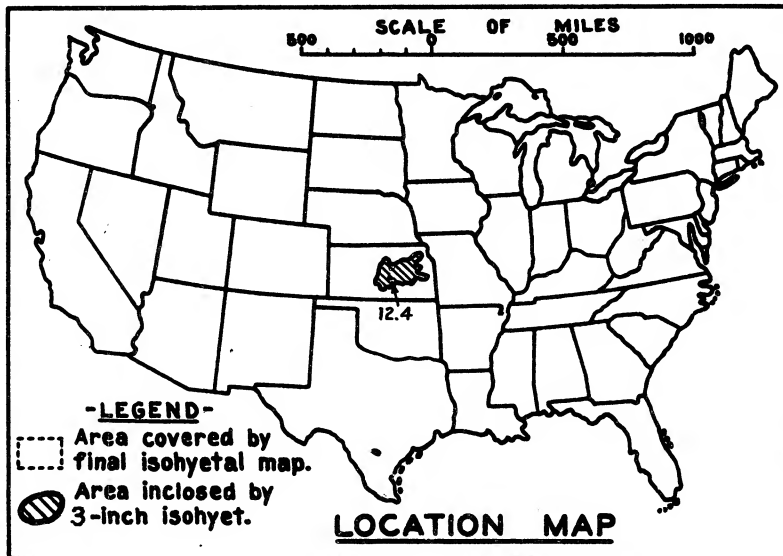
STORM STUDIES - ISOHYETAL MAP

Storm of June 23-26, 1942 Assignment MR 6-1
Study Prepared by: Kansas City, Mo. District
Missouri River Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 18-22, 1941

Assignment MR 6 - 2

Location NE Kansas

Study Prepared by:

Missouri River Division
Kansas City District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 5/9/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/11/45

Remarks: Center at

Lindsborg, Kansas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	20
Form 5001-B (24-hour " " " ")-----	-
Form 5001-D (" " " " " ")-----	5
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	17

PART II

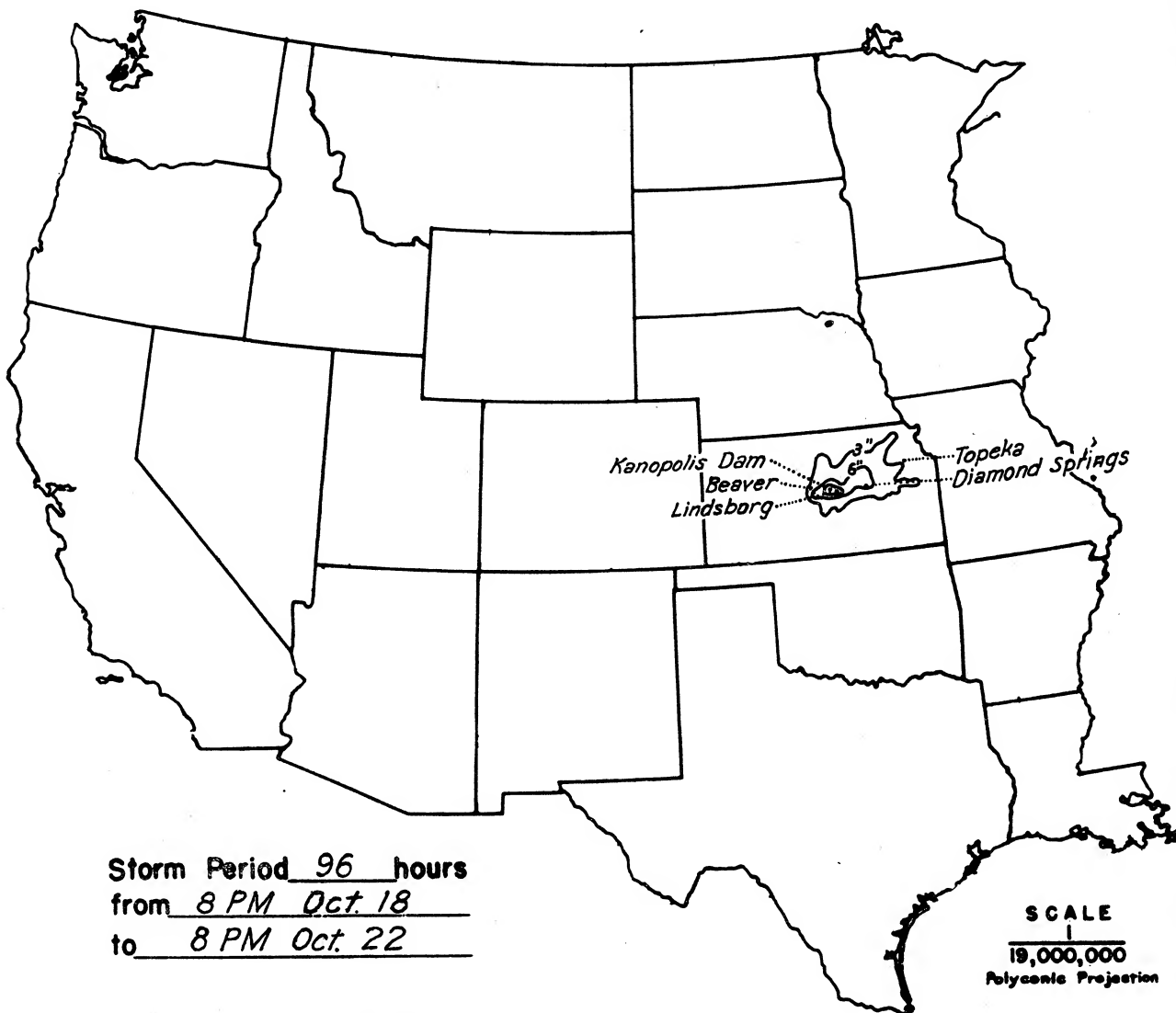
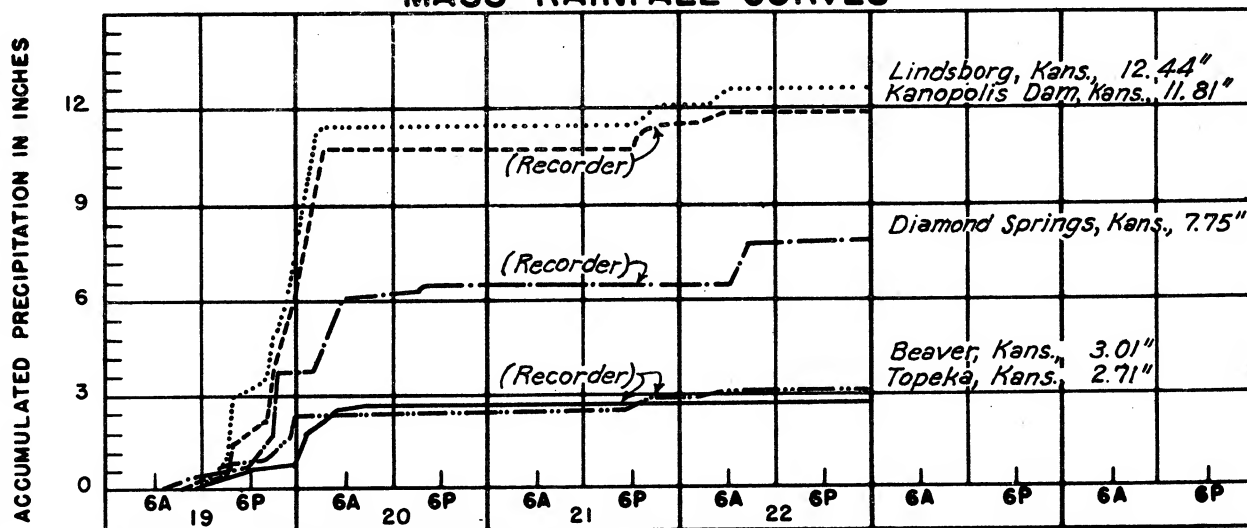
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

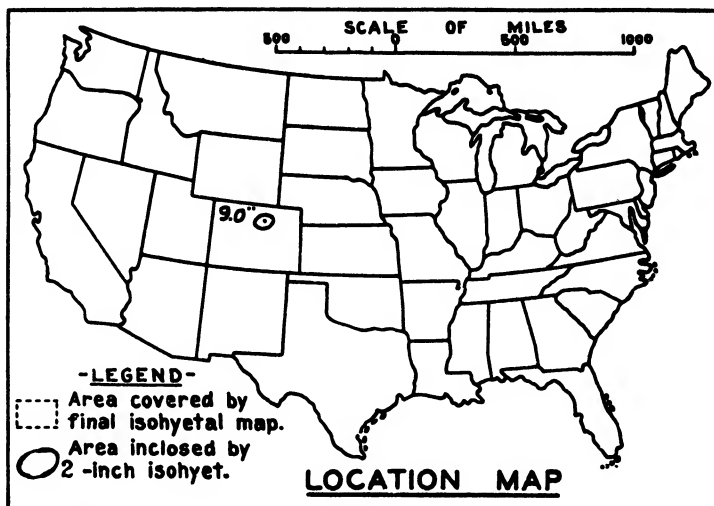
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
1	8.4	10.7	11.4	11.4	11.4	11.4	11.4	12.0	12.4	12.4	
10	8.1	10.5	11.1	11.2	11.2	11.2	11.2	11.7	12.2	12.2	
100	7.3	9.9	10.3	10.4	10.4	10.4	10.4	10.9	11.5	11.5	
200	6.9	9.6	9.9	10.1	10.1	10.1	10.1	10.5	11.1	11.1	
500	6.0	8.7	9.0	9.1	9.1	9.1	9.1	9.6	10.2	10.2	
1,000	5.1	7.3	7.7	7.9	7.9	7.9	7.9	8.4	9.1	9.1	
2,000	4.1	6.1	6.5	6.7	6.7	6.7	6.7	7.2	7.8	7.8	
5,000	2.8	4.4	4.8	5.2	5.2	5.4	5.4	5.7	6.2	6.3	
10,000	1.9	3.1	3.7	4.1	4.2	4.3	4.3	4.5	4.8	5.0	
16,000	1.5	2.4	2.9	3.3	3.4	3.5	3.5	3.7	4.0	4.1	

STORM STUDIES - ISOHYETAL MAPStorm of October 18-22, 1941 Assignment MR 6-2Study Prepared by: Kansas City, Mo. District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 30 May 1948

Assignment MR 7-18

Location Colorado

Study Prepared by:

Missouri River Division
Omaha District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 8/28/52Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4/15/57

Remarks:

Center near Ft. Collins, Colo.
Dewpoint 66° Ref. Pt.
570 SE**DATA AND COMPUTATIONS COMPILED**

GRID E-20

PART I

Preliminary isohyetal map, in 1 sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 1

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 2

Misc. precip. records, meteorological data, etc.----- 4

Form 5002 (Mass rainfall curves)----- 4

PART II

Final isohyetal maps, in 1 sheet, scale 1" = 1 Mile

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 1

Form S-11 (Depth-area data from isohyetal map)----- 1

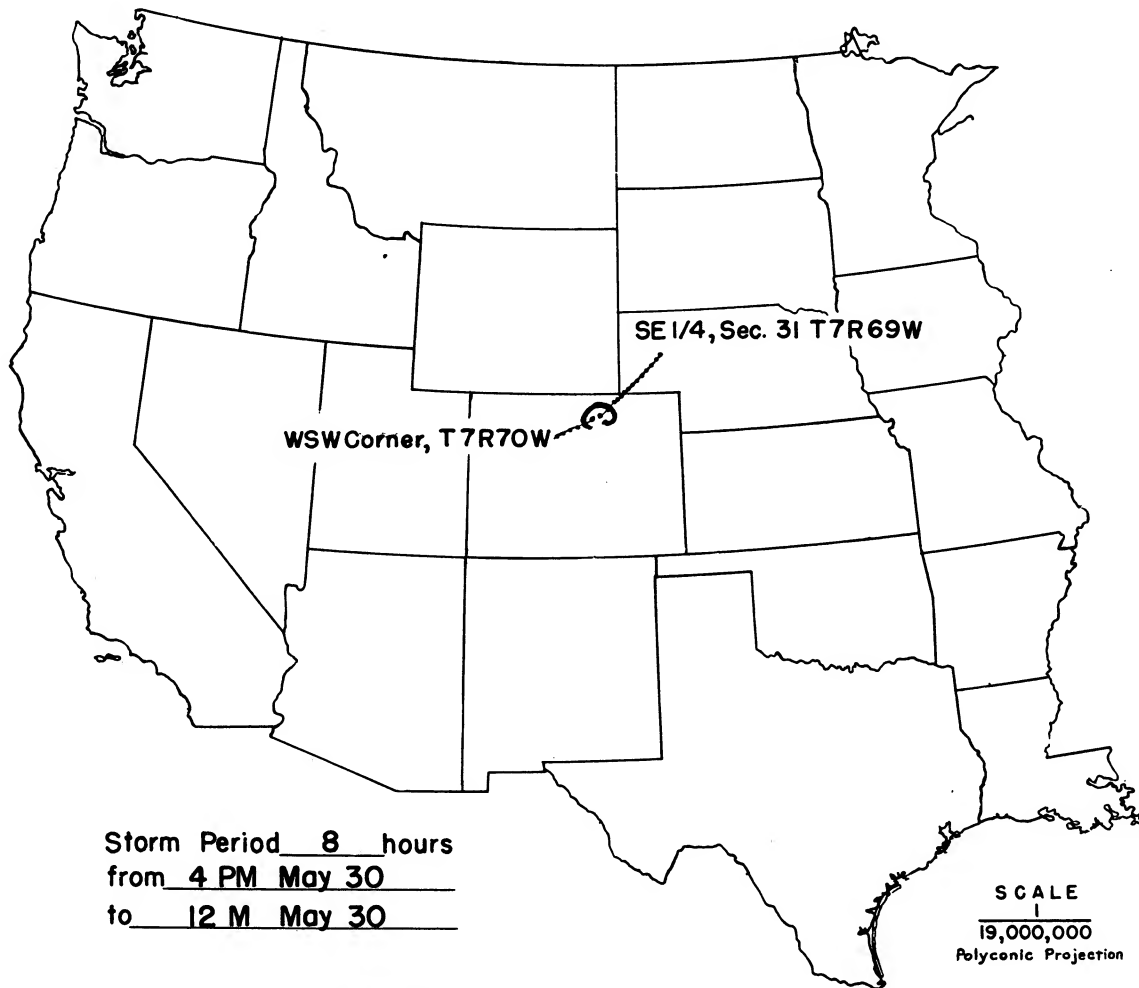
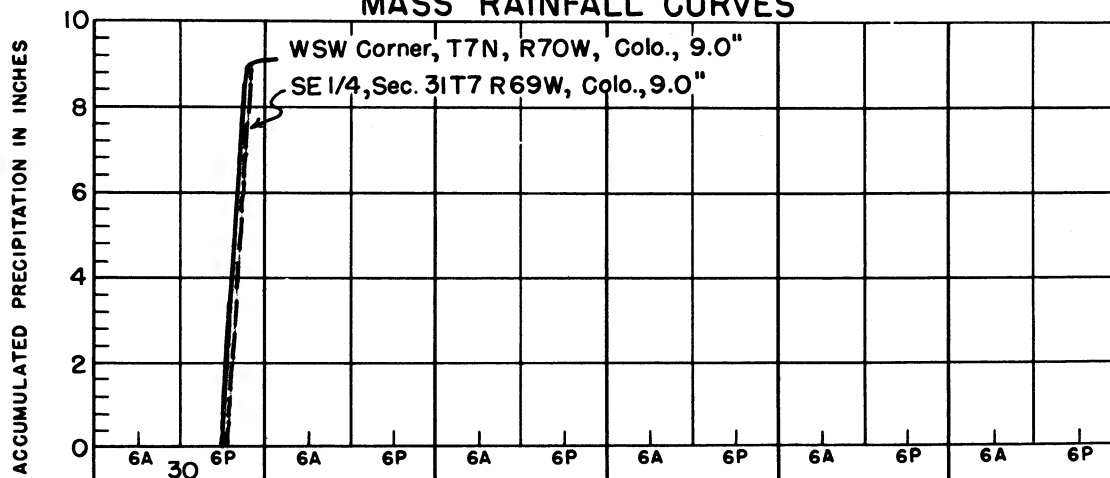
Form S-12 (Maximum depth-duration data)----- 2

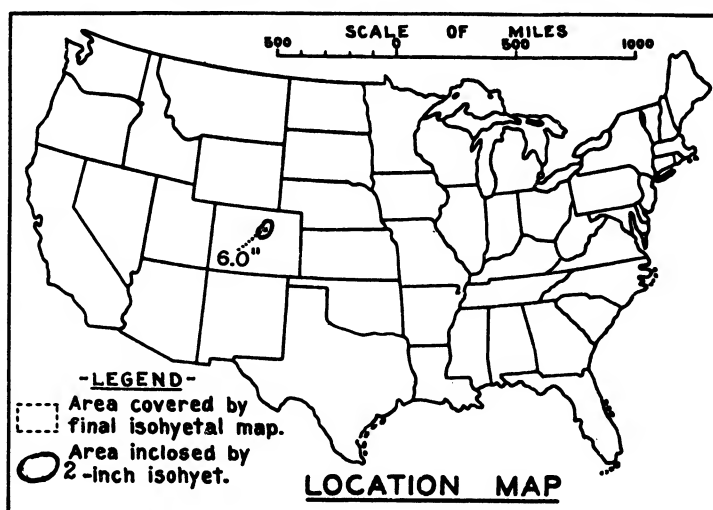
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	1	2	3	4	5	6-8				
Max. Station	4.3	5.9	7.8	8.8	9.0	9.0				
10	2.2	4.6	6.5	7.2	7.8	7.8				
20	2.2	4.4	6.1	6.5	6.9	6.9				
50	1.6	3.1	4.1	4.5	5.1	5.4				
88	1.3	2.5	3.3	3.5	4.0	4.2				

STORM STUDIES - ISOHYETAL MAPStorm of 30 May 1948Assignment MR 7-18Study Prepared by: Missouri River Division
Omaha, Nebr. District**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 7 June 1948
 Assignment MR 7-19
 Location Colorado
 Study Prepared by:
 Missouri River Division
 Omaha District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/1/52
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/30/57

Remarks:

Center Near Golden, Colo.
 Dewpoint 65° Ref. Pt.
 310 SE

DATA AND COMPUTATIONS COMPILED

Grid E-20

PART I

Preliminary isohyetal map, in 1 sheet, scale 1" = 2 Miles

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)	0
Form 5001-B (24-hour " ")	0
Form 5001-D (" " " ")	1
Misc. precip. records, meteorological data, etc.	21
Form 5002 (Mass rainfall curves)	3

PART II

Final isohyetal maps, in 1 sheet, scale 1" = 2 Miles

Data and computation sheets:

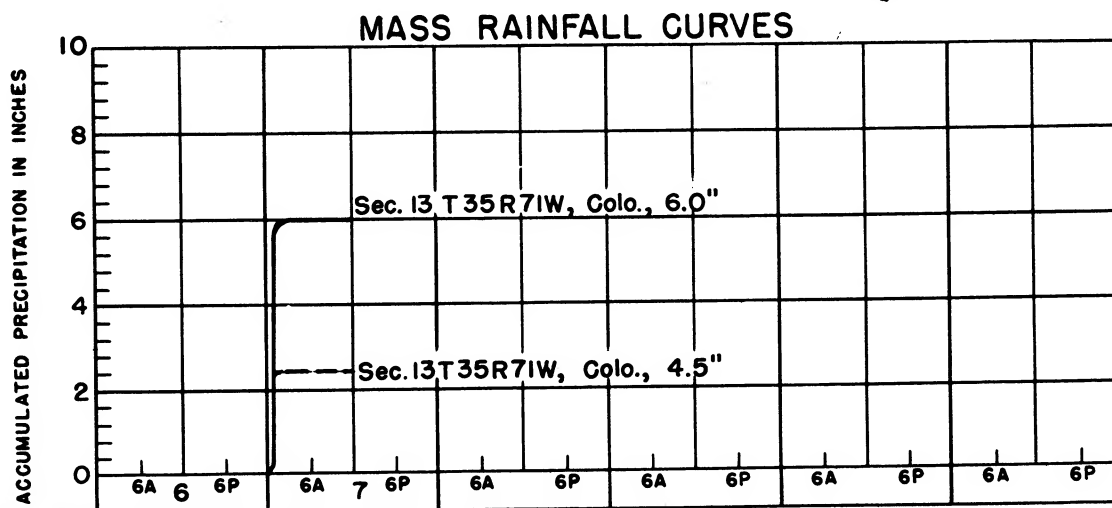
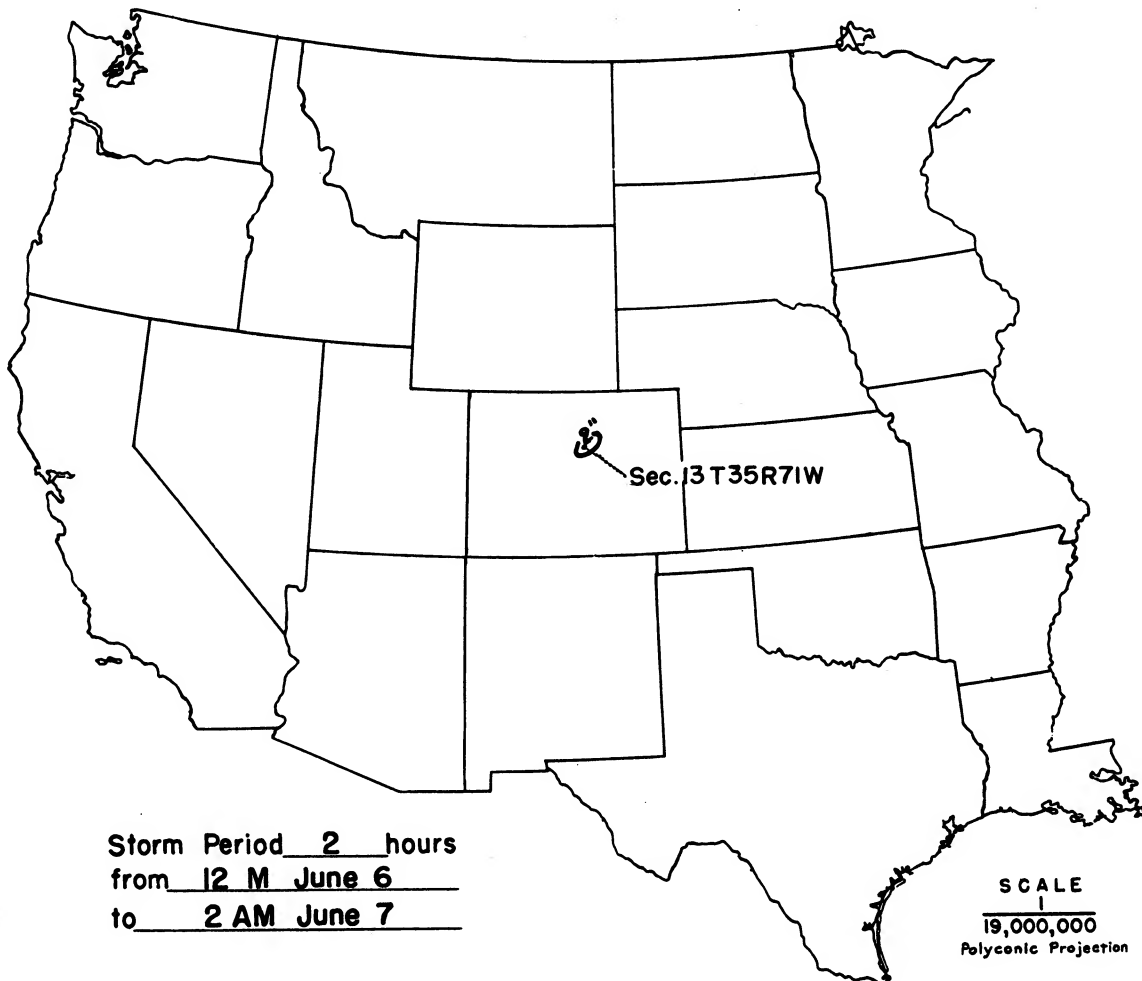
Form S-10 (Data from mass rainfall curves)	1
Form S-11 (Depth-area data from isohyetal map)	1
Form S-12 (Maximum depth-duration data)	2
Maximum duration-depth-area curves	1
Data relating to periods of maximum rainfall	3

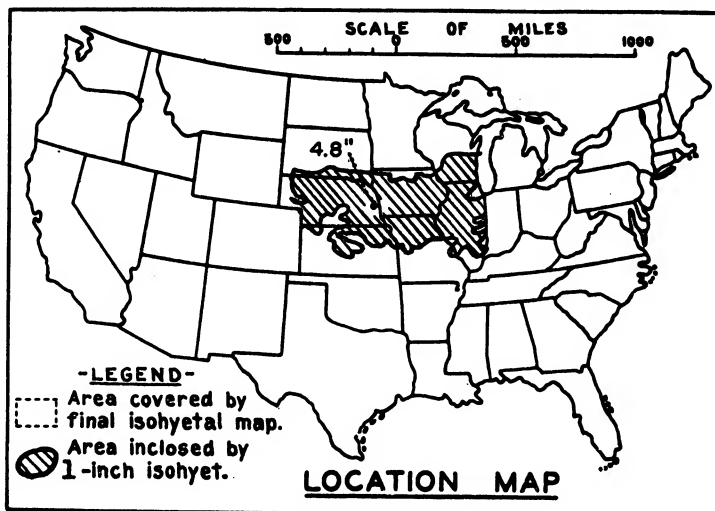
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	1	2								
Max. Station	6.0	6.0								
1	5.5	5.5								
2	4.9	4.9								
5	3.9	4.0								
8	3.3	3.5								

STORM STUDIES - ISOHYETAL MAP

Storm of 7 June 1948 Assignment MR 7-19
Study Prepared by: Missouri River Division
Omaha, Nebr. District



STORM STUDIES - PERTINENT DATA SHEET

Storm of 25-30 May 1947
 Assignment MR 8-6
 Location Iowa, Nebr., Mo., & Kans.
 Study Prepared by:
 North Central Division
 Rock Island District Office

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54
 Remarks: Center at
 Plattsmouth, Nebr.

DATA AND COMPUTATIONS COMPILED

GRID D-15

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----

Form 5001-B (24-hour " " ")-----

Form 5001-D (" " " " ")-----

Misc. precip. records, meteorological data, etc. Part I and Part II phases

Form 5002 (Mass rainfall curves)-----in their entirety.

NOTE: This study was computed
 by the Regional Method
 which does not employ the

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 8

Form S-11 (Depth-area data from isohyetal map)----- 4

Form S-12 (Maximum depth-duration data)----- 3

Maximum duration-depth-area curves----- 1

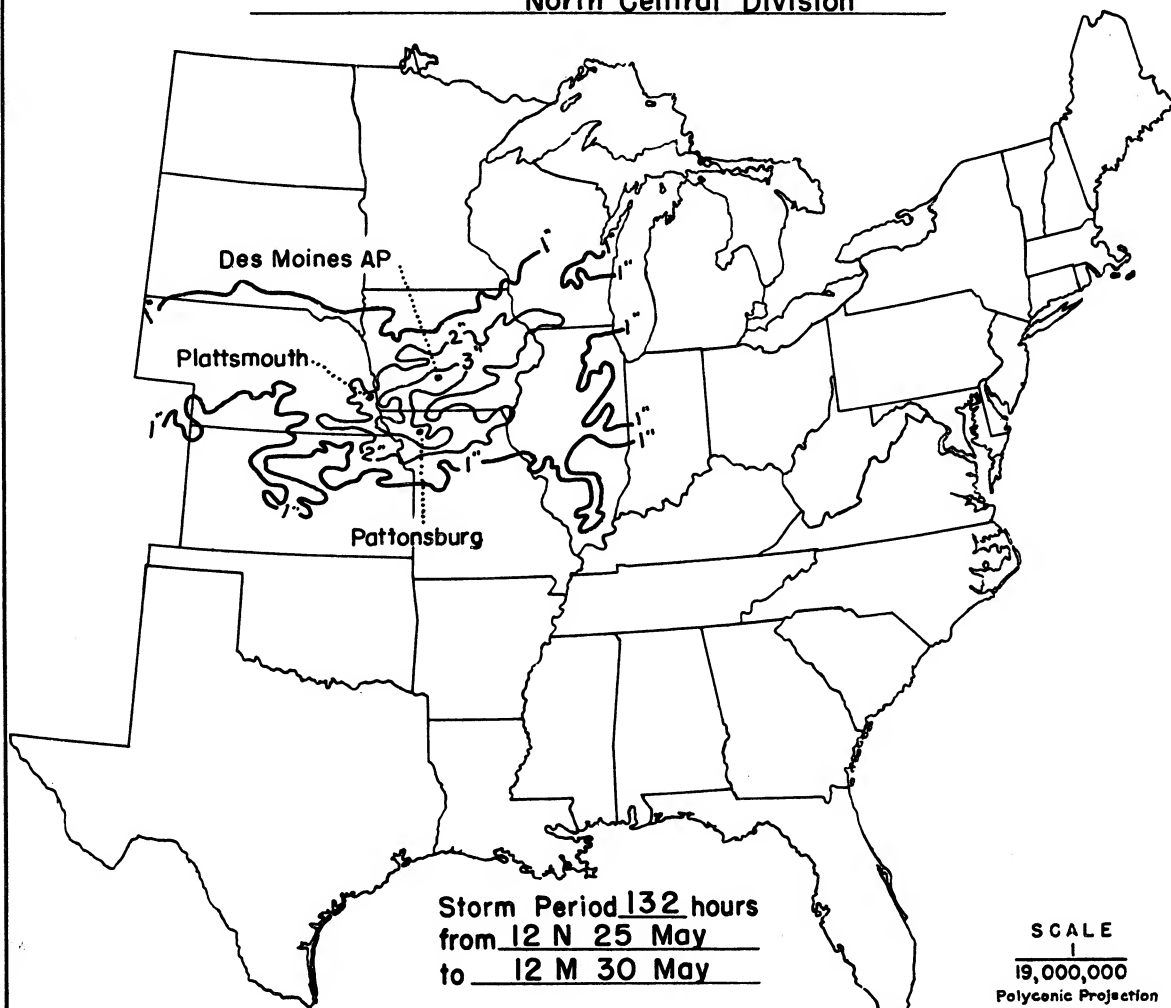
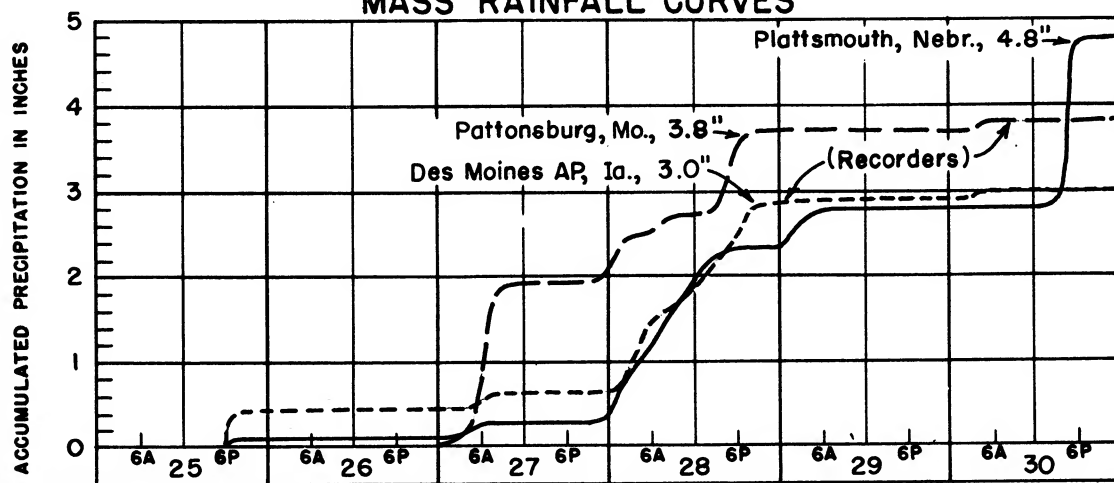
Data relating to periods of maximum rainfall----- 0

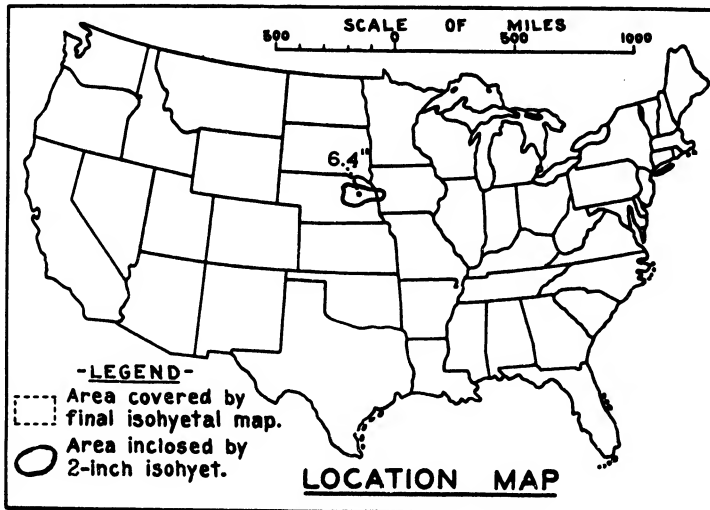
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	36	48	72	120	132	
10	2.7	2.7	2.7	2.7	4.1	4.6	4.6	4.7	4.8	
200	2.3	2.4	2.5	2.6	3.4	4.1	4.1	4.2	4.2	
3000	1.5	1.7	2.3	2.5	2.7	3.2	3.3	3.4	3.4	
10000	1.2	1.4	2.1	2.4	2.5	2.8	3.0	3.1	3.1	
30000	0.9	1.1	1.7	1.9	2.0	2.4	2.6	2.8	2.8	
70000	0.7	0.9	1.3	1.6	1.7	2.0	2.1	2.3	2.3	
100000	0.6	0.8	1.2	1.5	1.6	1.8	2.0	2.2	2.2	
150000	0.5	0.7	1.0	1.3	1.4	1.6	1.8	1.9	1.9	
200000	0.4	0.6	0.9	1.2	1.3	1.5	1.6	1.7	1.7	
250000	0.4	0.6	0.8	1.1	1.2	1.3	1.4	1.5	1.5	
300000	0.3	0.5	0.7	0.9	1.0	1.1	1.2	1.3	1.3	

STORM STUDIES - ISOHYETAL MAP

Storm of 25-30 May 1947 Assignment MR 8-6
Study Prepared by: Rock Island, Ill., District
North Central Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 31 May - 1 June 1947
 Assignment MR 8-8
 Location Nebraska
 Study Prepared by:
 Missouri River Division
 Omaha District Office

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54

Remarks:

Center near Leigh, Nebr.

DATA AND COMPUTATIONS COMPILED

Grid D-16

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----

Form 5001-B (24-hour " ")-----

Form 5001-D (" " " ")-----

Misc. precip. records, meteorological data, etc.---

Form 5002 (Mass rainfall curves)-----

NOTE: This study was computed
 by the Regional Method
 which does not employ the
 Part I and Part II phases
 in their entirety.

PART II

Final isohyetal maps, in sheet, scale

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----

Form S-11 (Depth-area data from isohyetal map)-----

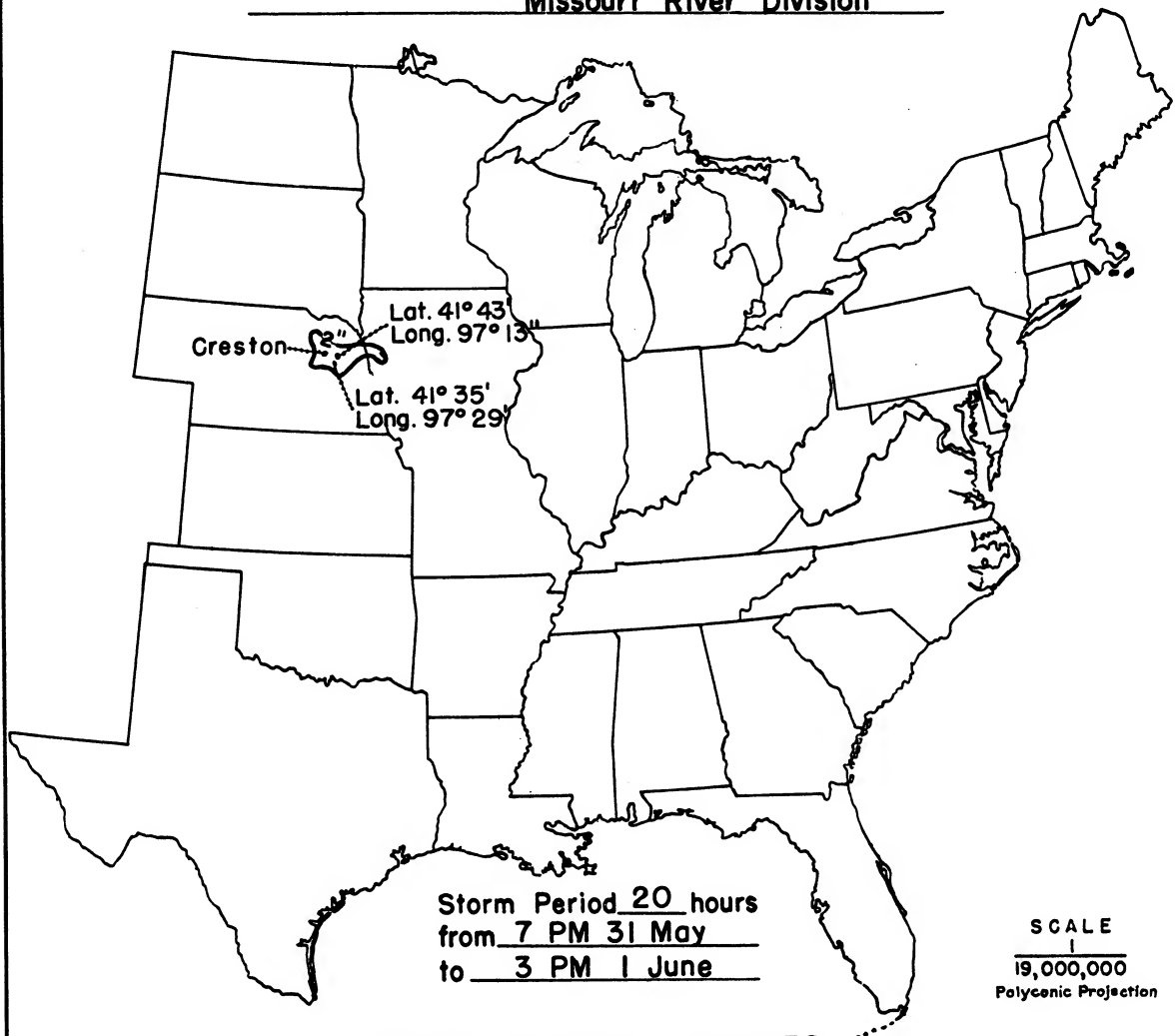
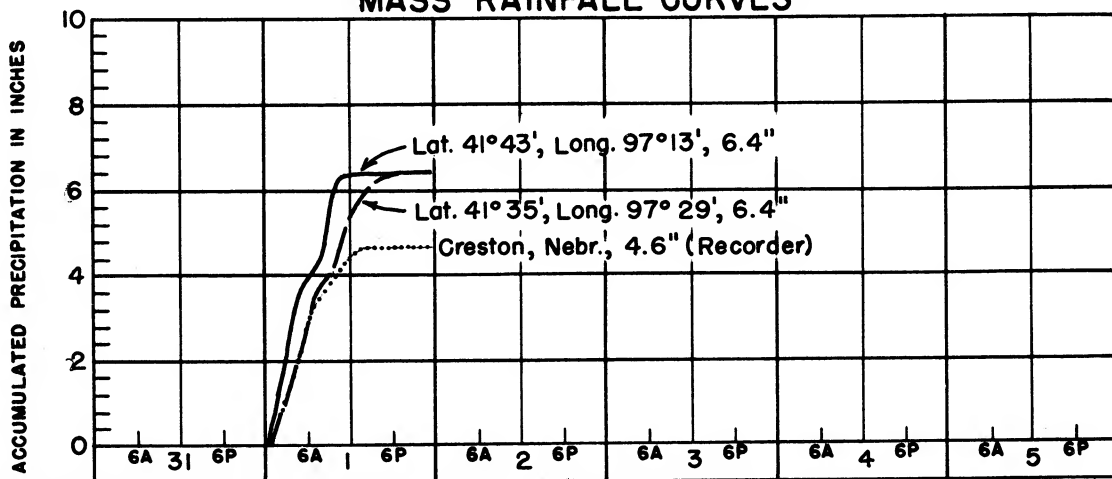
Form S-12 (Maximum depth-duration data)-----

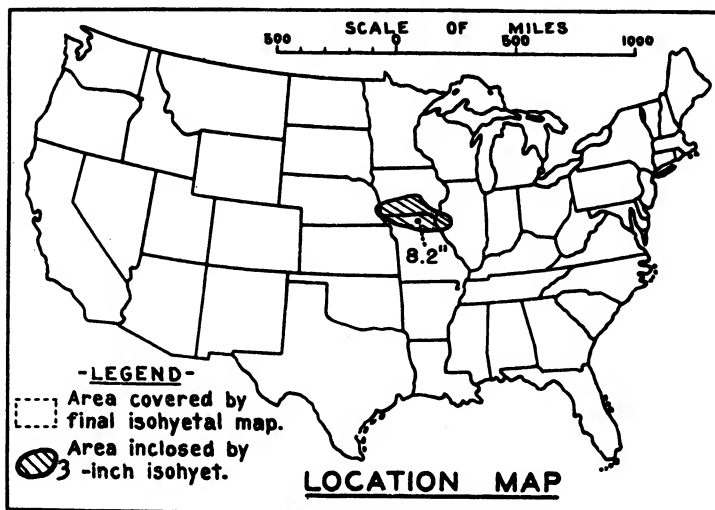
Maximum duration-depth-area curves-----

Data relating to periods of maximum rainfall-----

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	2	4	6	8	10	12	20					
10	2.1	3.4	3.6	4.5	6.0	6.4	6.4					
50	1.7	3.0	3.3	4.1	5.3	5.7	5.7					
100	1.5	2.6	3.0	3.8	4.5	4.7	5.0					
500	1.2	2.0	2.5	3.0	3.6	3.9	4.1					
1000	1.1	1.8	2.3	2.9	3.4	3.6	3.8					
1500	1.0	1.7	2.2	2.8	3.3	3.5	3.6					
2000	1.0	1.6	2.2	2.7	3.1	3.3	3.5					
3000	0.9	1.5	2.0	2.5	2.9	3.1	3.2					
4000	0.8	1.4	1.9	2.4	2.8	2.9	3.1					
5350	0.7	1.3	1.8	2.2	2.6	2.8	2.9					

STORM STUDIES - ISOHYETAL MAPStorm of 31 May - 1 June 1947Assignment MR 8-8Study Prepared by: Omaha, Neb., District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 2-7 June 1947
 Assignment MR 8-10
 Location Iowa and Missouri
 Study Prepared by:
 Missouri River Division
 Kansas City District

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/19/52
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54

Remarks: Center near
 Browning, Mo.
 Dewpoint 72°
 Ref. Pt. 90 SW

GRID
 E-14

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	44
Form 5001-B (24-hour " " " ")-----	0
Form 5001-D (" " " " " ")-----	14
Misc. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	42

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

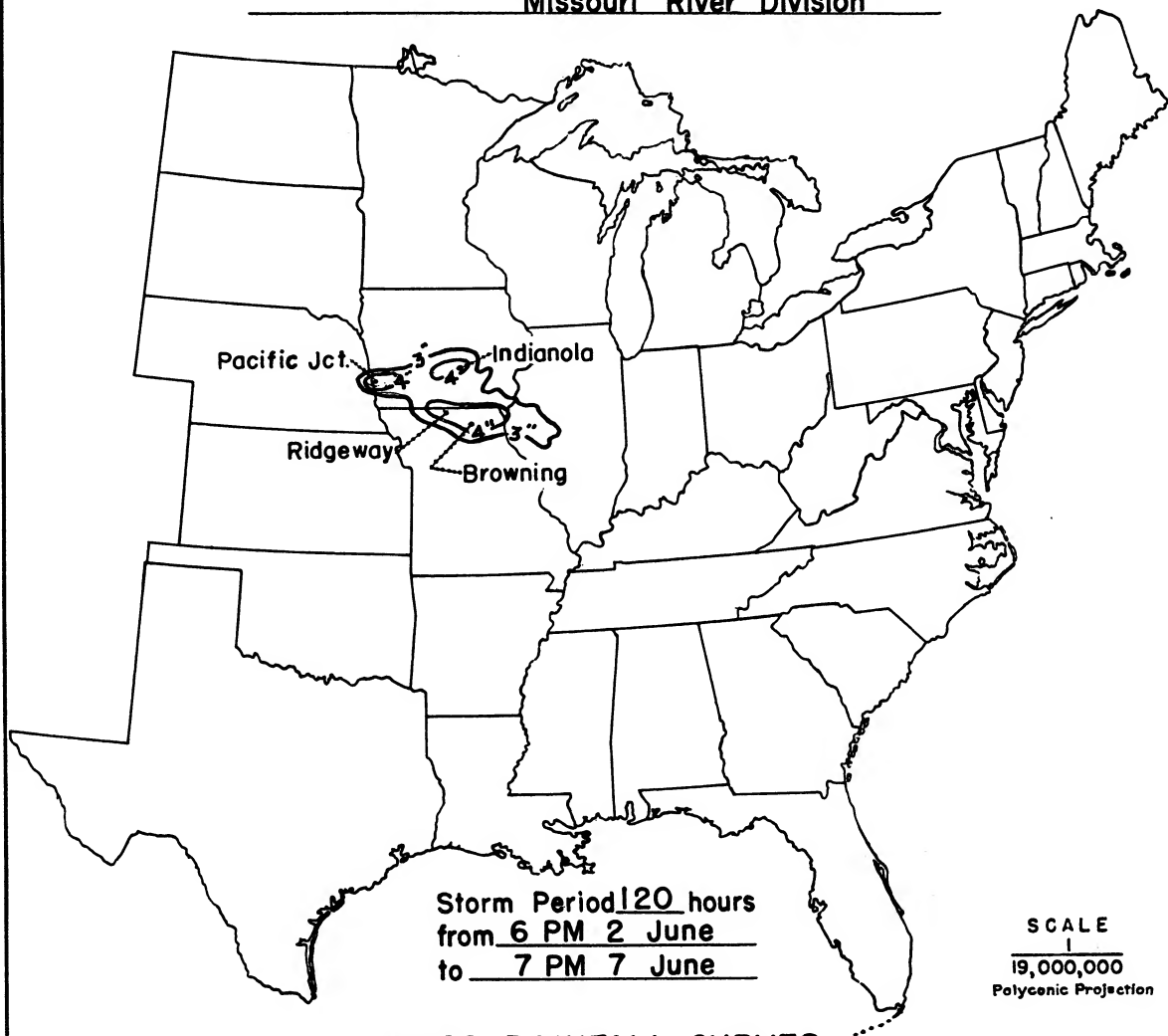
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	0

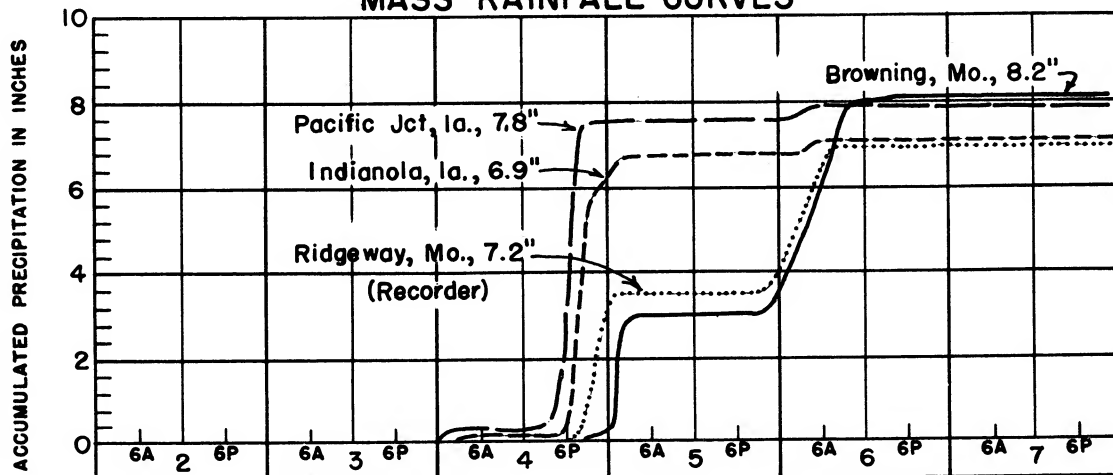
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

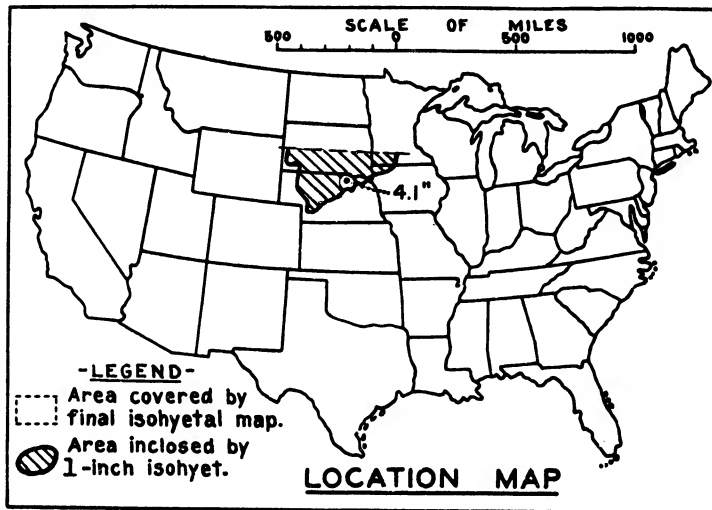
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	7.1	7.2	7.2	7.5	7.5	7.9	8.2	8.2	8.2	8.2	8.2
100	5.6	5.8	6.0	6.3	6.4	7.4	8.0	8.1	8.1	8.1	8.1
200	5.1	5.4	5.5	5.9	6.0	7.2	7.9	8.1	8.1	8.1	8.1
500	4.5	4.8	5.0	5.3	5.5	6.9	7.6	7.9	7.9	7.9	7.9
1,000	4.0	4.3	4.5	4.8	5.0	6.6	7.4	7.6	7.6	7.6	7.6
2,000	3.6	3.9	4.1	4.4	4.6	6.0	7.0	7.1	7.1	7.1	7.1
5,000	3.0	3.3	3.5	3.7	3.9	5.1	6.2	6.4	6.4	6.4	6.4
10,000	2.5	2.9	3.1	3.3	3.4	4.4	5.3	5.5	5.6	5.6	5.6
20,000	2.0	2.4	2.6	2.7	2.9	3.6	4.4	4.6	4.8	4.8	4.8
50,000	1.4	1.8	2.0	2.1	2.2	2.7	3.3	3.5	3.6	3.7	3.7
100,000	1.0	1.3	1.5	1.5	1.6	1.9	2.4	2.6	2.8	2.9	2.9
200,000	0.6	0.8	0.9	1.0	1.0	1.2	1.5	1.7	1.8	2.0	2.0
306,000	0.3	0.5	0.6	0.6	0.7	0.8	1.0	1.2	1.3	1.5	1.5

STORM STUDIES - ISOHYETAL MAP

Storm of 2-7 June 1947 Assignment MR 8-10Study Prepared by: Kansas City, Mo., District
Missouri River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 7-10 June 1947
 Assignment MR 8-12
 Location So. Dak. & Nebr.
 Study Prepared by:
 Missouri River Division
 Omaha District Office

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54
 Remarks: Center
 near Niobrara, Nebr.

DATA AND COMPUTATIONS COMPILED

GRID D-16

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)---

Form 5001-B (24-hour " ")---

Form 5001-D (" " " ")-----

Misc. precip. records, meteorological data, etc.

Form 5002 (Mass rainfall curves)-----

NOTE: This study was computed
 by the Regional Method
 which does not employ the
 Part I and Part II phases
 in their entirety.

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 8

Form S-11 (Depth-area data from isohyetal map)----- 5

Form S-12 (Maximum depth-duration data)----- 5

Maximum duration-depth-area curves----- 1

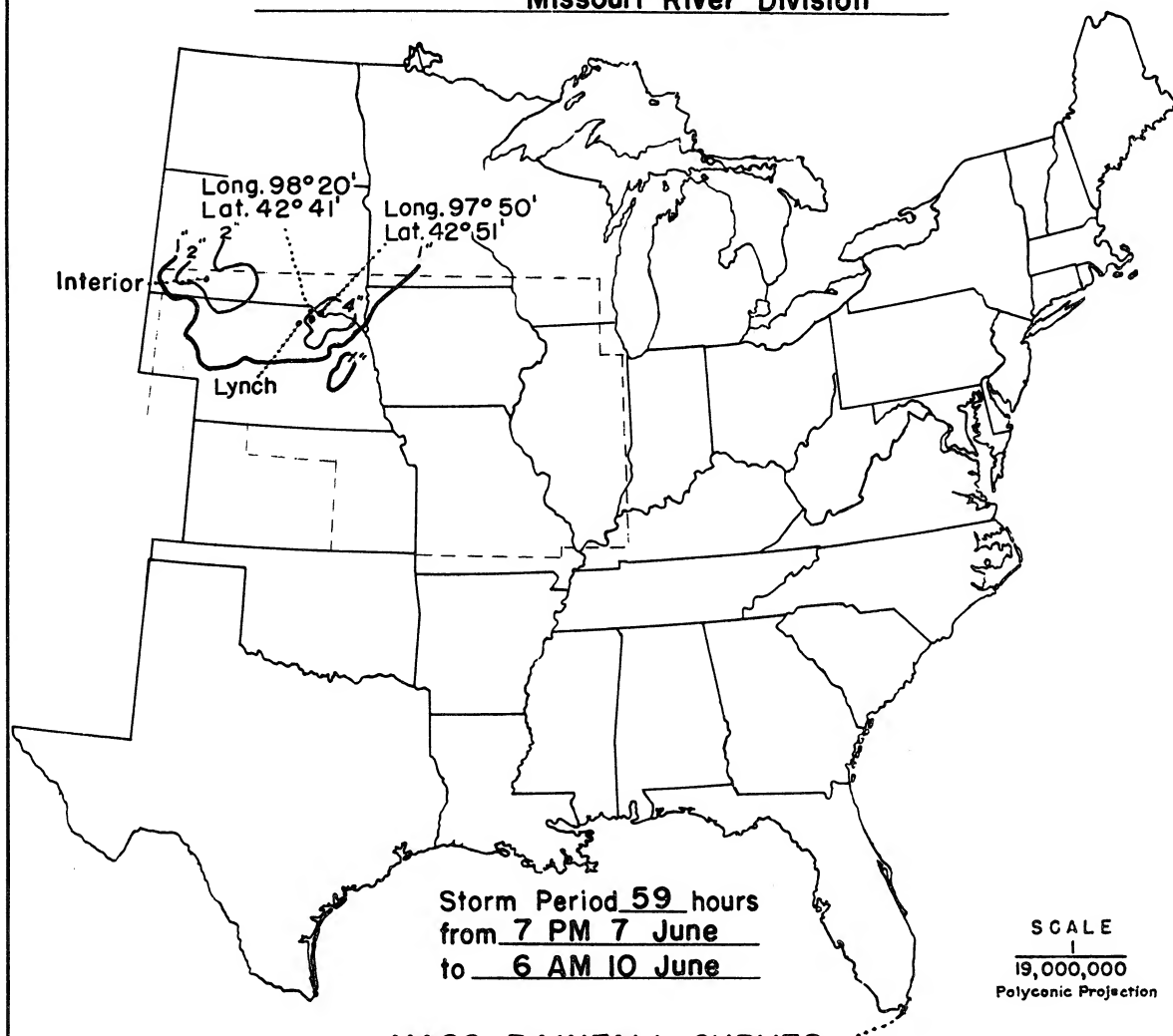
Data relating to periods of maximum rainfall----- 0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

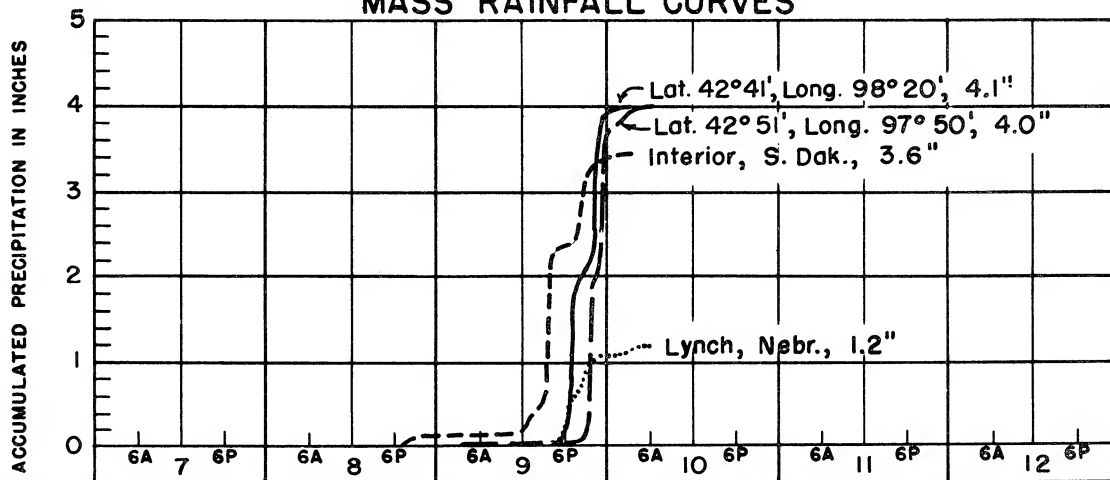
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	36	48	59					
10	4.1	4.1	4.1	4.1	4.1	4.1	4.1					
100	3.6	3.7	3.7	3.7	3.7	3.7	3.7					
200	3.4	3.5	3.5	3.5	3.5	3.5	3.5					
500	3.1	3.2	3.3	3.3	3.4	3.4	3.4					
1000	2.8	3.0	3.2	3.2	3.3	3.3	3.3					
2000	2.6	2.7	3.0	3.0	3.3	3.3	3.3					
5000	2.2	2.3	2.7	2.7	3.1	3.1	3.1					
10000	1.8	2.0	2.4	2.5	2.8	2.8	2.8					
20000	1.5	1.8	2.0	2.1	2.4	2.4	2.4					
50000	1.0	1.3	1.4	1.4	1.6	1.6	1.6					
100000	0.7	0.9	0.9	0.9	1.1	1.1	1.1					
200000	0.3	0.5	0.5	0.5	0.6	0.6	0.6					
306000	0.2	0.3	0.3	0.3	0.3	0.3	0.4					

Form S-2

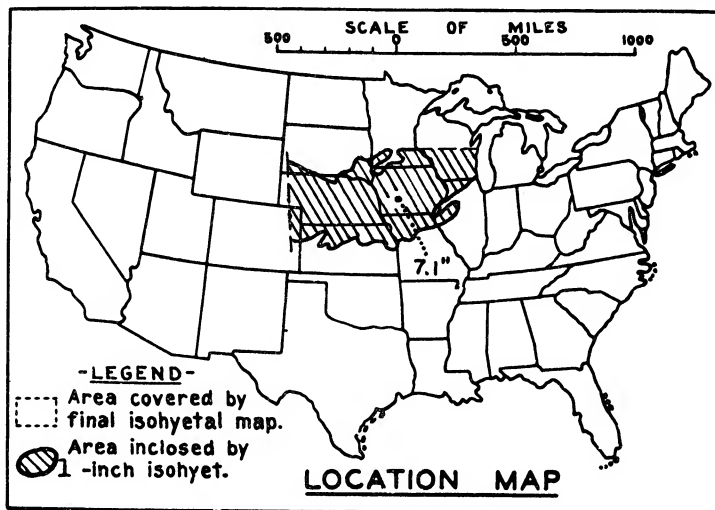
STORM STUDIES - ISOHYETAL MAP

Storm of 7-10 June 1947Assignment MR 8-12Study Prepared by: Omaha, Neb., DistrictMissouri River Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET



Storm of 10-13 June 1947
 Assignment MR 8-14
 Location Iowa, Kans., Nebr. & Minn
 Study Prepared by:
 North Central Division
 Rock Island District Office

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54
 Remarks: Center at
 Earlham, Iowa
 Dewpoint 72° Ref. Pt.
 Springfield, Mo.

DATA AND COMPUTATIONS COMPILED

GRID D-14

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)---

Form 5001-B (24-hour " ")--- NOTE: This study was computed

Form 5001-D (" " " ")----- by the Regional Method

Misc. precip. records, meteorological data, etc.. which does not employ the

Form 5002 (Mass rainfall curves)----- Part I and Part II phases

in their entirety.

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 8

Form S-11 (Depth-area data from isohyetal map)----- 4

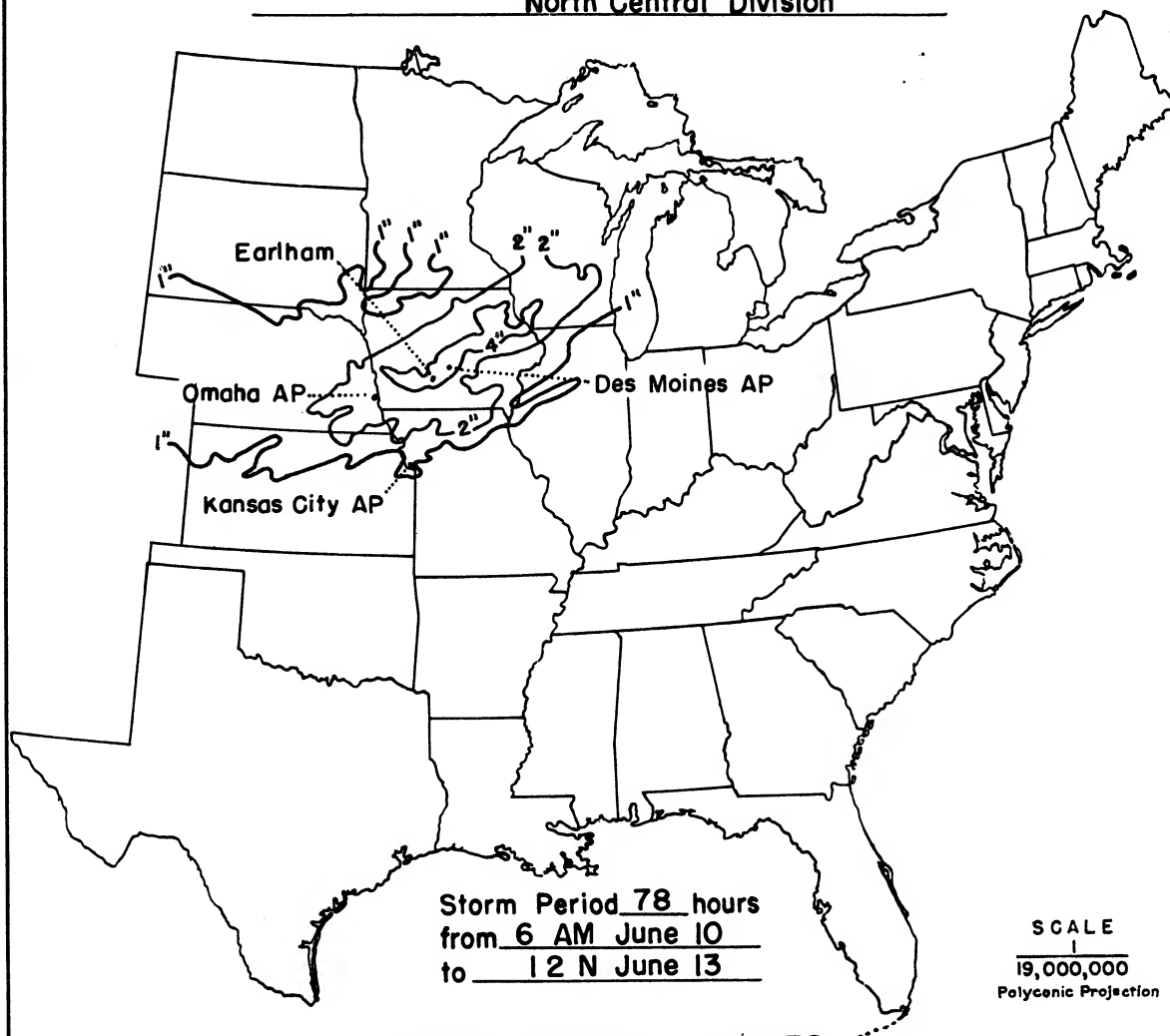
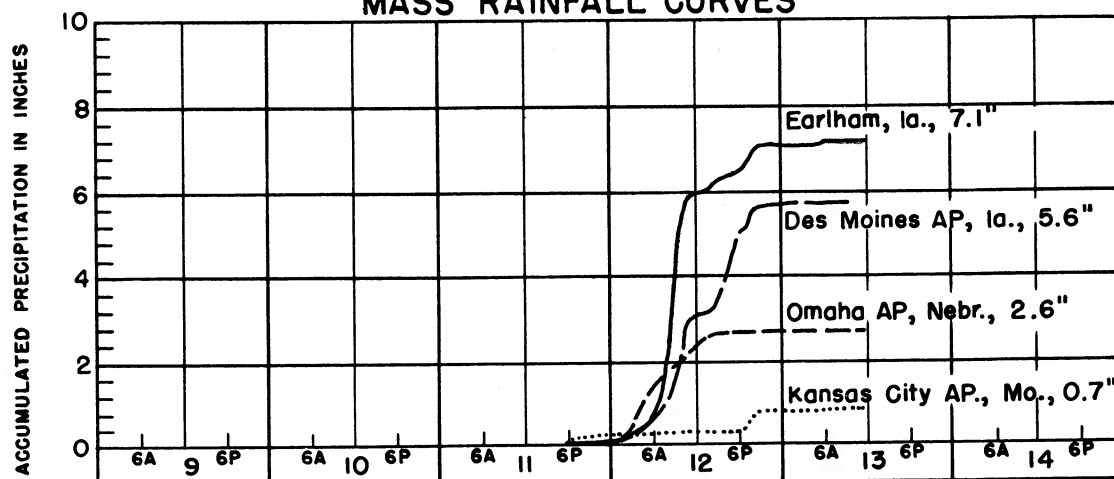
Form S-12 (Maximum depth-duration data)----- 3

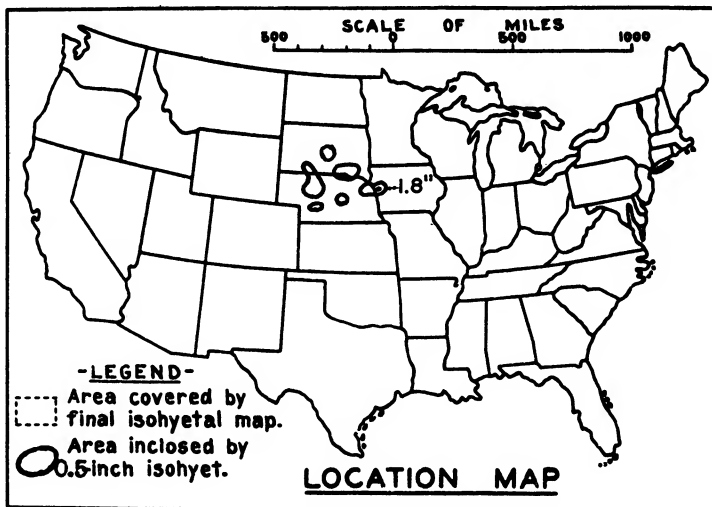
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	48	72	78					
10	5.3	6.2	7.0	7.0	7.1	7.1	7.1					
200	4.8	5.4	5.8	6.4	6.5	6.5	6.5					
3000	2.8	3.9	4.8	5.2	5.3	5.3	5.3					
10000	2.0	3.1	4.1	4.7	4.7	4.7	4.7					
30000	1.4	2.3	3.0	3.6	3.9	4.0	4.0					
70000	1.0	1.7	2.2	2.7	3.1	3.2	3.2					
100000	0.8	1.5	1.9	2.3	2.7	2.8	2.8					
150000	0.6	1.2	1.5	1.9	2.2	2.3	2.3					
200000	0.5	1.0	1.2	1.5	1.9	2.0	2.0					
250000	0.4	0.8	1.0	1.3	1.6	1.7	1.7					
300000	0.3	0.7	0.8	1.1	1.4	1.5	1.5					

STORM STUDIES - ISOHYETAL MAPStorm of 10-13 June 1947Assignment MR 8-14Study Prepared by: Rock Island, Ill., District
North Central Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 13-16 June 1947
 Assignment MR 8-16
 Location Nebr. & Iowa
 Study Prepared by:
 Missouri River Division
 Omaha District Office

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54

Remarks:

Center at Sioux City, Iowa

DATA AND COMPUTATIONS COMPILED

Grid D-15

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data) --- NOTE: This study was computed
 Form 5001-B (24-hour " ")----- by the Regional Method
 Form 5001-D (" " ")----- which does not employ the
 Misc. precip. records, meteorological data, etc. Part I and Part II phases
 Form 5002 (Mass rainfall curves)----- in their entirety.

PART II

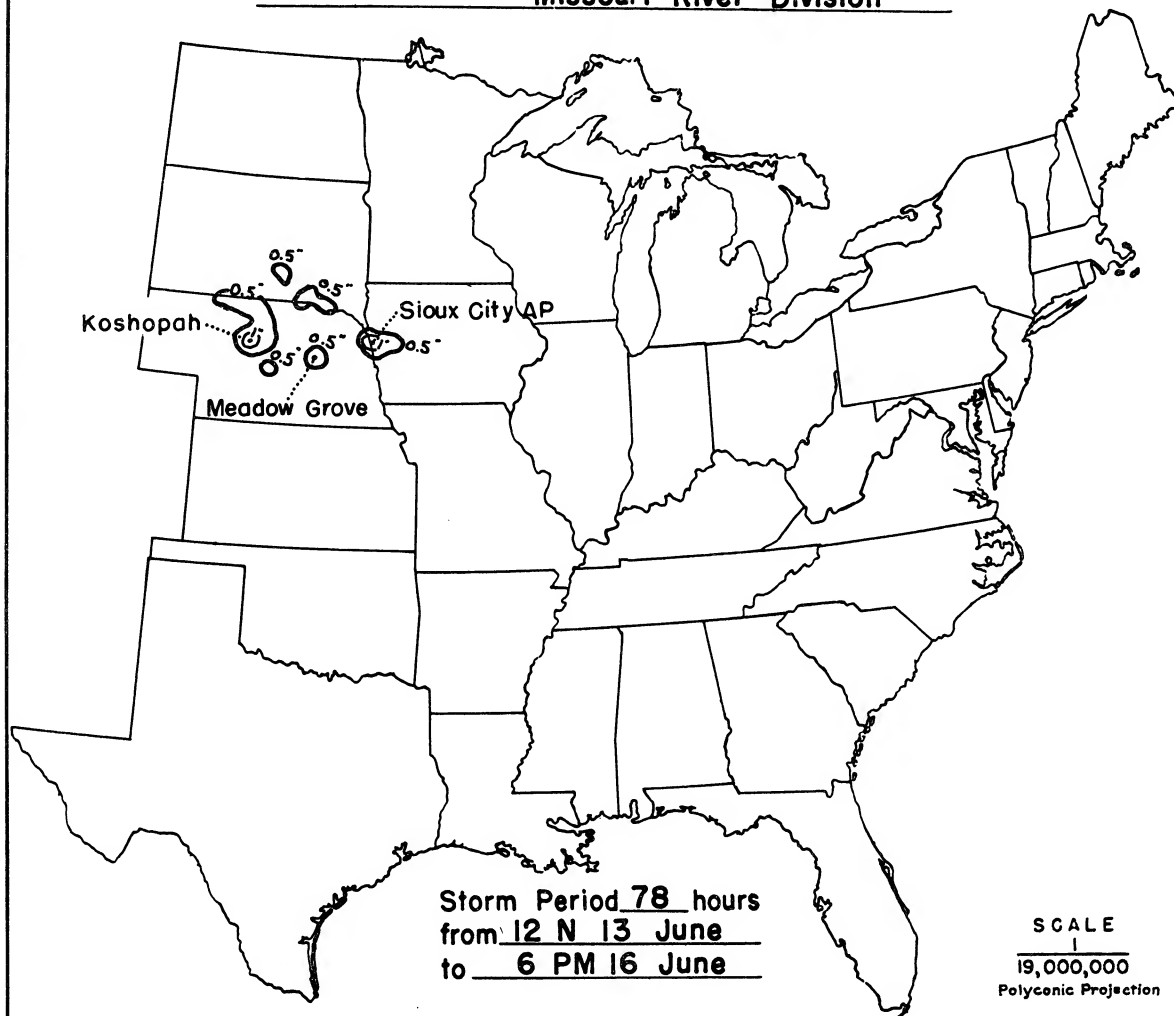
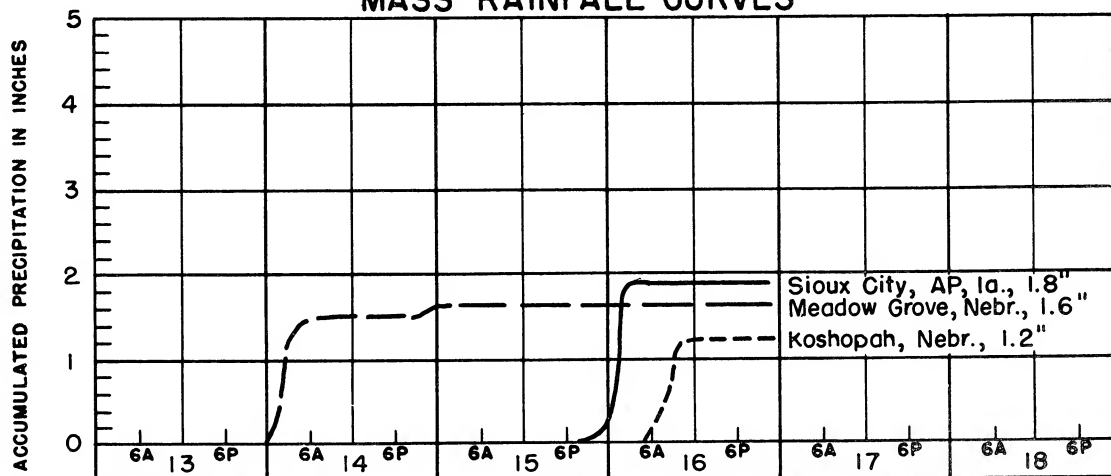
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

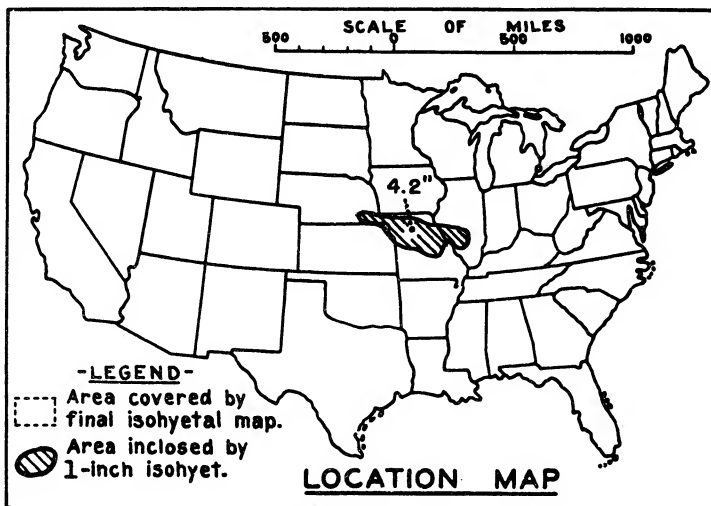
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 10
 Form S-11 (Depth-area data from isohyetal map)----- 4
 Form S-12 (Maximum depth-duration data)----- 4
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	36	48	72	78	
10	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
100	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
200	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
500	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
1000	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
2000	0.6	0.8	0.9	0.9	0.9	0.9	0.9	0.9	
5000	0.3	0.6	0.7	0.7	0.7	0.7	0.7	0.7	
10000	0.2	0.4	0.4	0.4	0.6	0.6	0.6	0.6	
20000	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	
50000	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	
100000	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	
200000	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
306000	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

STORM STUDIES - ISOHYETAL MAPStorm of 13-16 June 1947Assignment MR 8-16Study Prepared by: Omaha, Neb., District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 16-18 June 1947
 Assignment MR 8-18
 Location Nebr., Mo., & Ill.
 Study Prepared by:
 Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 1/6/53
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54

Remarks: Center at
 Brookfield, Mo.
 Dewpoint 64° Ref. Pt.
 300 S

DATA AND COMPUTATIONS COMPILED

GRID E-14

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	29
Form 5001-B (24-hour " " " ")-----	0
Form 5001-D (" " " " " ")-----	7
Misc. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	19

PART II

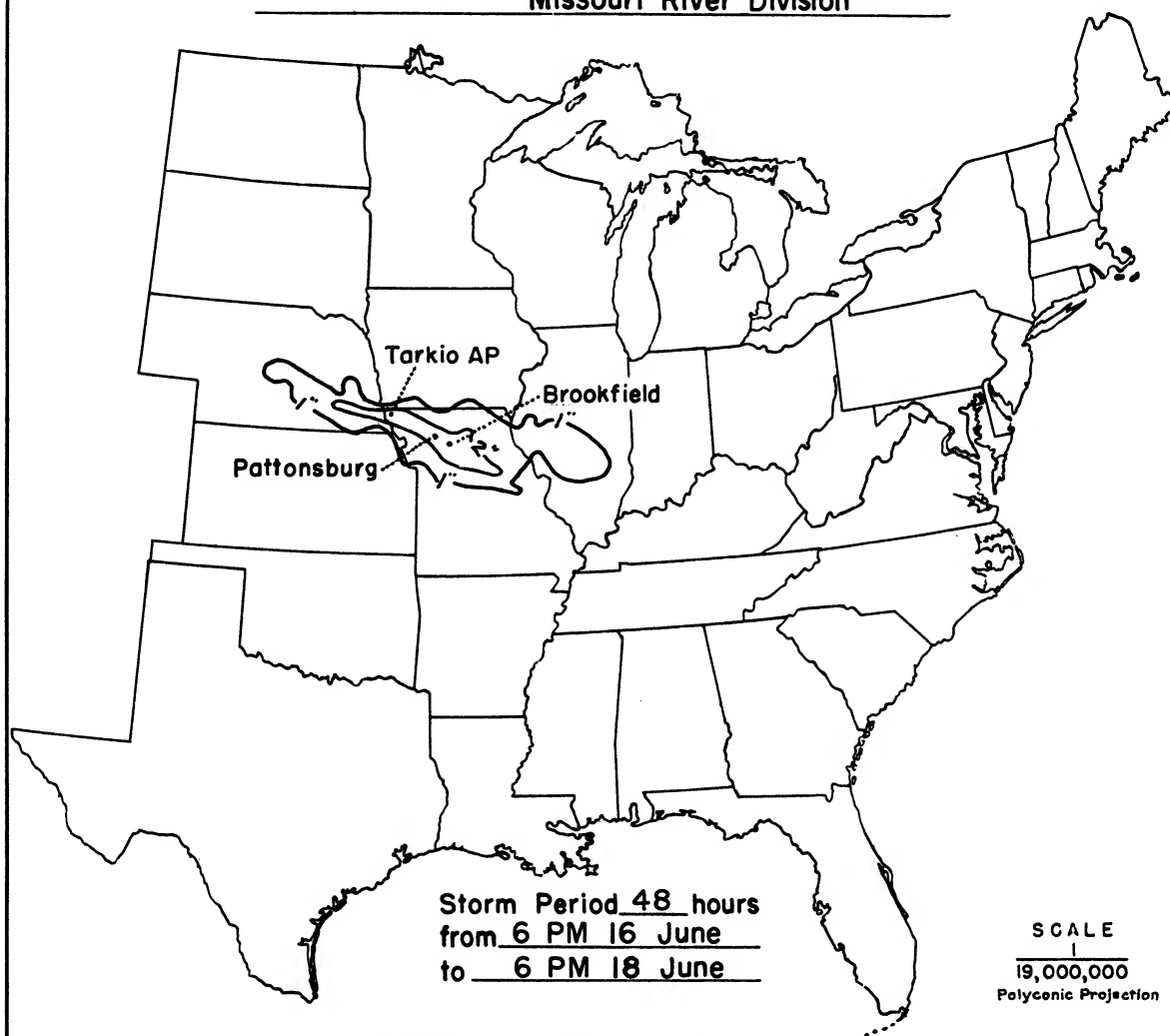
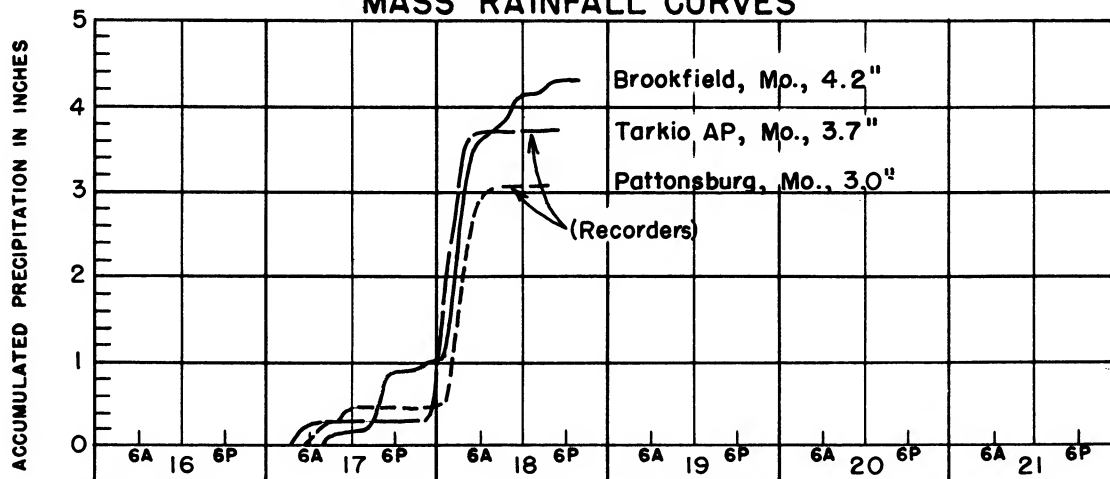
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

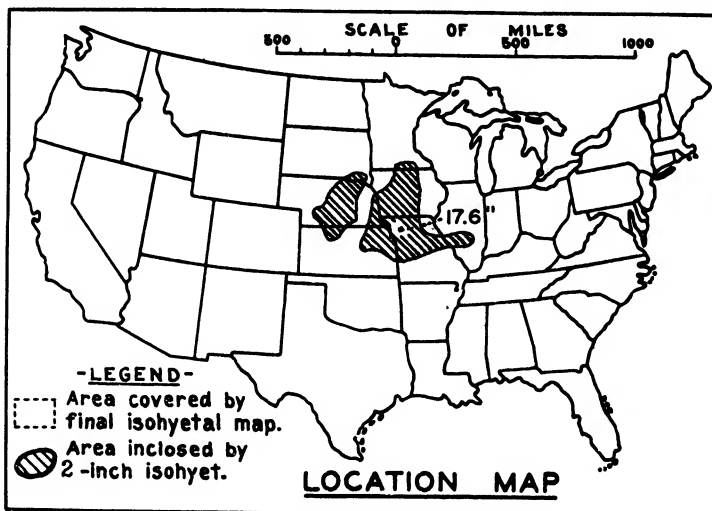
Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	4
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	3.3	3.4	3.6	4.0	4.2	4.2	4.2					
100	2.8	3.1	3.3	3.8	4.0	4.1	4.1					
200	2.6	2.9	3.2	3.8	3.9	4.0	4.0					
500	2.5	2.7	3.0	3.6	3.7	3.8	3.8					
1,000	2.3	2.6	2.8	3.4	3.5	3.5	3.5					
2,000	2.2	2.5	2.7	3.2	3.3	3.3	3.3					
5,000	1.9	2.3	2.4	2.8	3.0	3.0	3.0					
10,000	1.7	2.2	2.2	2.6	2.7	2.8	2.8					
20,000	1.4	1.8	1.9	2.2	2.3	2.4	2.4					
50,000	0.9	1.2	1.4	1.6	1.7	1.8	1.8					
100,000	0.6	0.8	1.0	1.2	1.3	1.4	1.4					
200,000	0.3	0.5	0.6	0.8	0.9	0.9	1.0					
306,000	0.2	0.3	0.4	0.5	0.6	0.6	0.7					

STORM STUDIES - ISOHYETAL MAPStorm of 16-18 June 1947Assignment MR 8-18Study Prepared by: Kansas City, Mo., District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET



Storm of 18-23 June 1947

Assignment MR 8-20

Location Ill, Ia, Kans, Minn.

Mo, Nebr, & S.Dak.

Study Prepared by:

Missouri River Division

Omaha District Office

Part I Reviewed by H. M. Sec. of

Weather Bureau, 12/17/52

Part II Approved by Office, Chief

of Engineers for Distribution

of Factual Data, 9/10/54

Remarks:

Center near Holt, Mo.

Dewpoint 75°, Ref. Pt. 140 S

DATA AND COMPUTATIONS COMPILED

Grid E-14

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)--- NOTE: This study was computed
 Form 5001-B (24-hour " ")-----by the Regional Method
 Form 5001-D (" " " ")-----which does not employ the
 Misc. precip. records, meteorological data, etc. Part I and Part II phases
 Form 5002 (Mass rainfall curves)-----in their entirety.

PART II

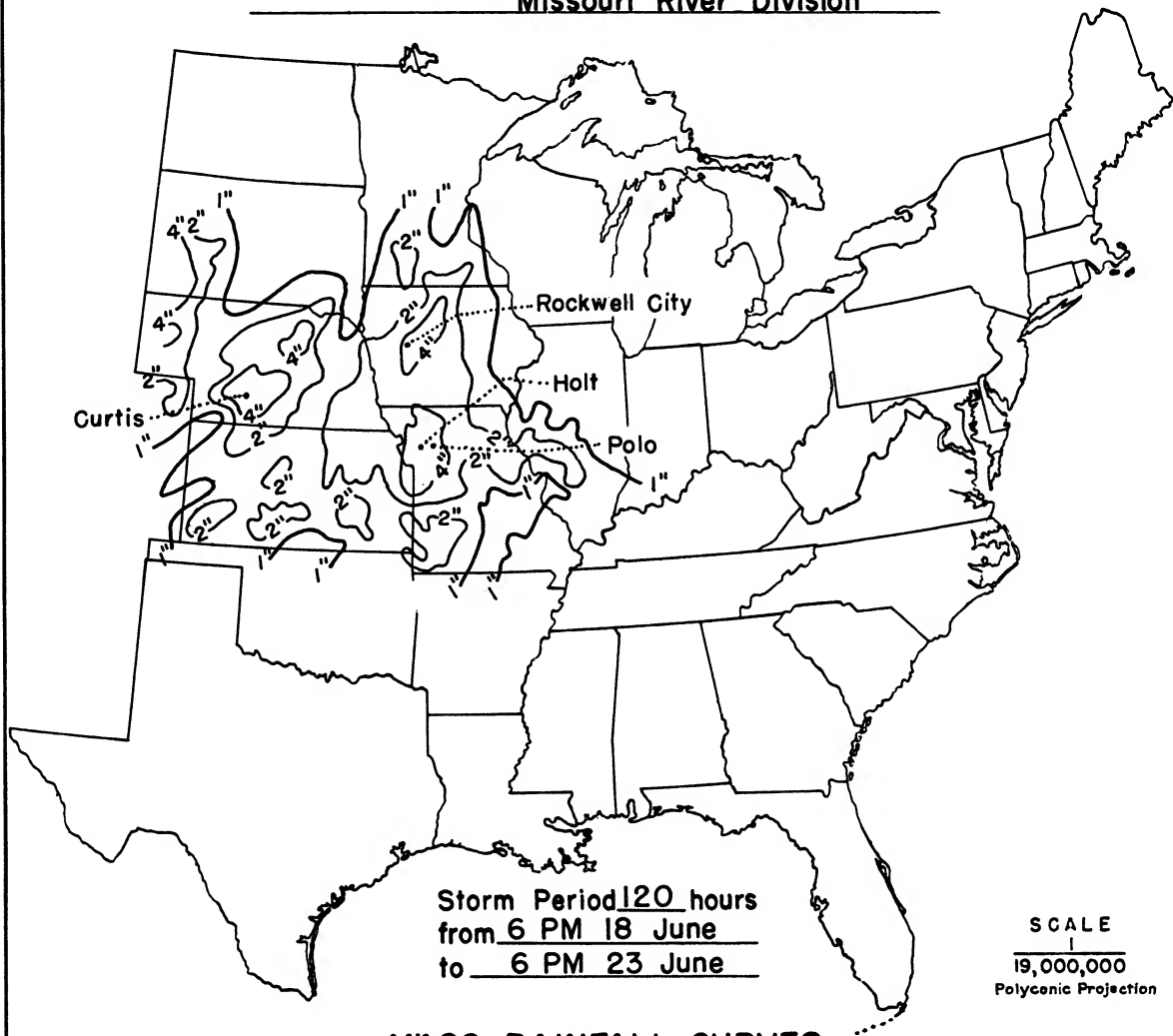
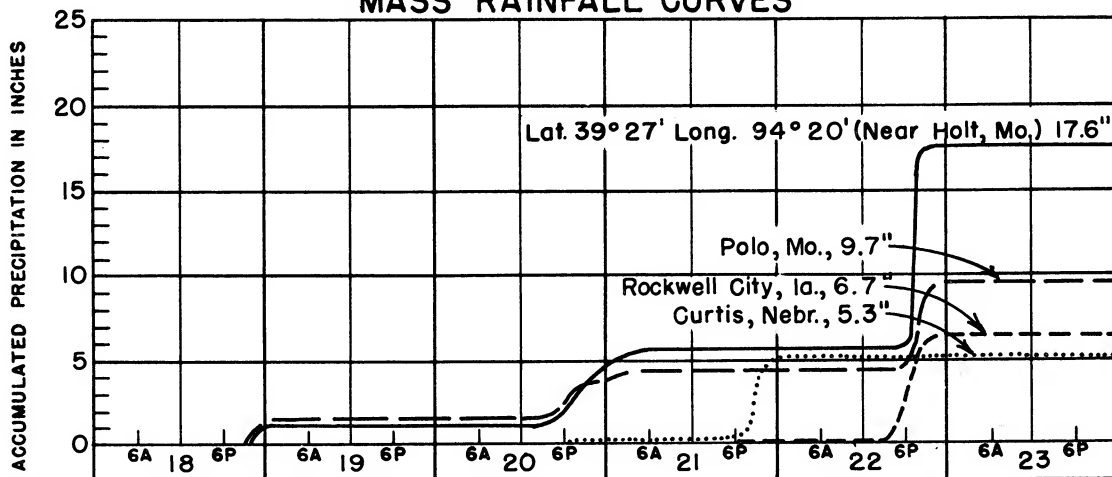
Final isohyetal maps, in 1 sheet, scale 1:100,000

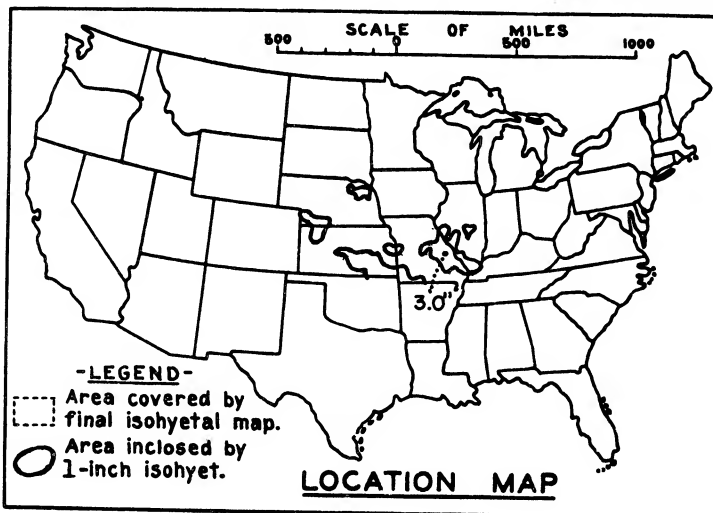
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 9
 Form S-11 (Depth-area data from isohyetal map)----- 4
 Form S-12 (Maximum depth-duration data)----- 7
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall-----

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	36	48	72	96	120	
Max. Station	12.0	12.0	12.0	12.0	12.0	14.4	16.6	15.6	17.6	
10	11.5	11.5	11.5	11.5	11.5	12.6	15.8	15.8	16.9	
100	7.9	7.9	7.9	7.9	7.9	9.3	12.9	12.9	14.1	
200	7.1	7.1	7.1	7.1	7.1	8.4	11.9	11.9	13.0	
500	6.3	6.3	6.3	6.3	6.3	7.4	10.6	10.6	11.6	
1000	5.6	5.6	5.6	5.6	5.6	6.6	9.6	9.6	10.5	
2000	4.9	4.9	4.9	4.9	4.9	5.7	8.4	8.4	9.3	
5000	3.5	3.7	3.7	3.7	3.7	4.6	6.7	6.7	7.3	
10000	2.6	2.9	3.0	3.0	3.0	3.7	5.4	5.4	5.9	
20000	1.8	2.1	2.2	2.2	2.2	3.1	4.4	4.6	4.9	
50000	1.2	1.4	1.5	1.6	1.8	2.5	3.2	3.5	3.8	
100000	0.8	1.0	1.2	1.4	1.6	2.1	2.7	2.9	3.0	
200000	0.5	0.7	0.8	1.1	1.4	1.7	2.1	2.2	2.3	
306000	0.3	0.5	0.6	0.7	0.9	1.2	1.5	1.6	1.8	

STORM STUDIES - ISOHYETAL MAPStorm of 18-23 June 1947Assignment MR 8-20Study Prepared by: Omaha, Nebr., District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 23-26 June 1947
 Assignment MR 8-22
 Location Mo., Ill., Kans. & Nebr
 Study Prepared by:
 North Central Division
 Rock Island District Office

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54

Remarks: Center at
 Annapolis, Mo.

DATA AND COMPUTATIONS COMPILED GRID F-12**PART I**

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)---

Form 5001-B (24-hour " ")--- NOTE: This study was computed

Form 5001-D (" " " ")----- by the Regional Method

Misc. precip. records, meteorological data, etc. which does not employ the

Form 5002 (Mass rainfall curves)----- Part I and Part II phases

in their entirety.

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 9

Form S-11 (Depth-area data from isohyetal map)----- 4

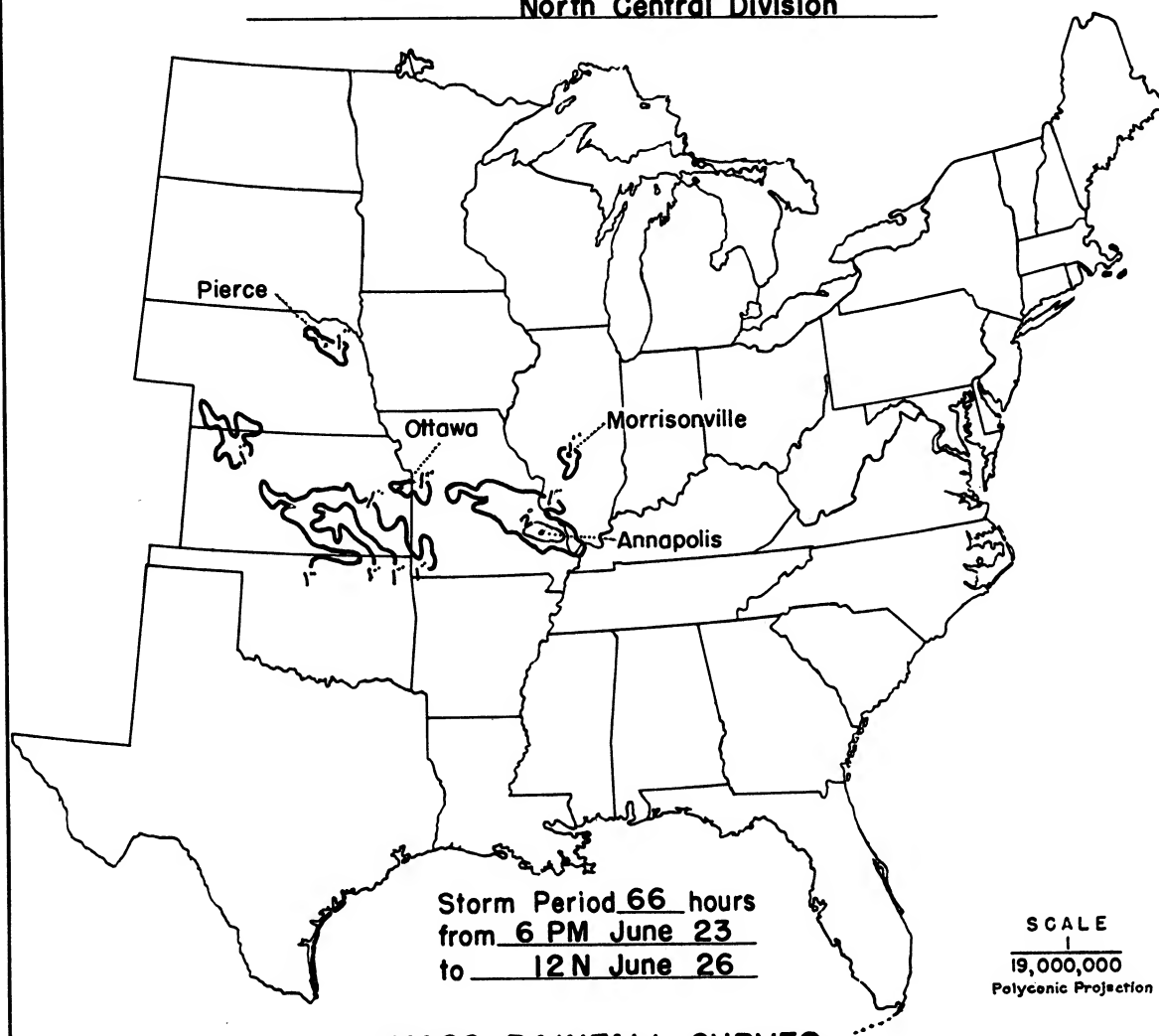
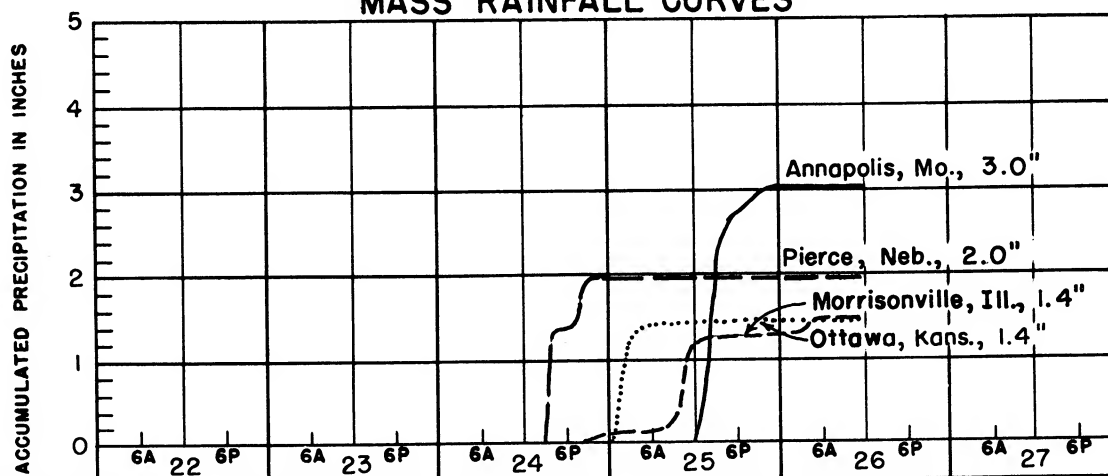
Form S-12 (Maximum depth-duration data)----- 5

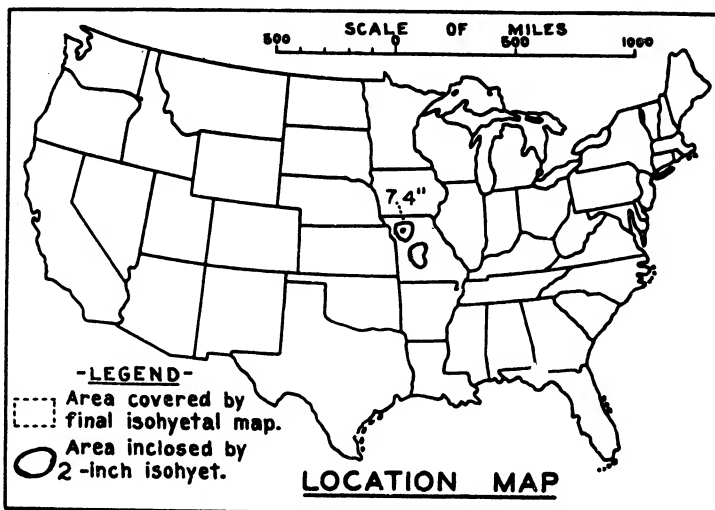
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	36	48	66					
10	2.7	3.0	3.0	3.0	3.0	3.0	3.0					
100	2.4	2.7	2.7	2.7	2.7	2.7	2.7					
200	2.4	2.6	2.6	2.6	2.6	2.6	2.6					
500	2.3	2.5	2.5	2.5	2.5	2.5	2.5					
1000	2.1	2.3	2.3	2.3	2.3	2.3	2.3					
2000	1.8	2.0	2.1	2.1	2.1	2.1	2.1					
5000	1.3	1.6	1.7	1.7	1.8	1.8	1.8					
10000	1.0	1.2	1.4	1.4	1.5	1.5	1.5					
20000	0.7	0.9	1.1	1.1	1.3	1.3	1.3					
50000	0.5	0.6	0.8	0.8	1.0	1.0	1.0					
100000	0.3	0.4	0.5	0.6	0.8	0.8	0.8					
200000	0.2	0.2	0.3	0.4	0.5	0.5	0.5					
306000	0.1	0.1	0.2	0.2	0.3	0.3	0.4					

STORM STUDIES - ISOHYETAL MAPStorm of 23-26 June 1947 Assignment MR 8-22Study Prepared by: Rock Island, Ill., District
North Central Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 26-30 June 1947
 Assignment MR 8-24
 Location Missouri
 Study Prepared by:
 Missouri River Division
 Kansas City District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 12/17/52
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54

Remarks: Center at
 Lathrop, Mo.
 Dewpoint 75° Ref. Pt.
 310 SSE

DATA AND COMPUTATIONS COMPILED

GRID E-14

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 17
 Form 5001-B (24-hour " ")----- 0
 Form 5001-D (" " " ")----- 4
 Misc. precip. records, meteorological data, etc.----- 1
 Form 5002 (Mass rainfall curves)----- 11

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

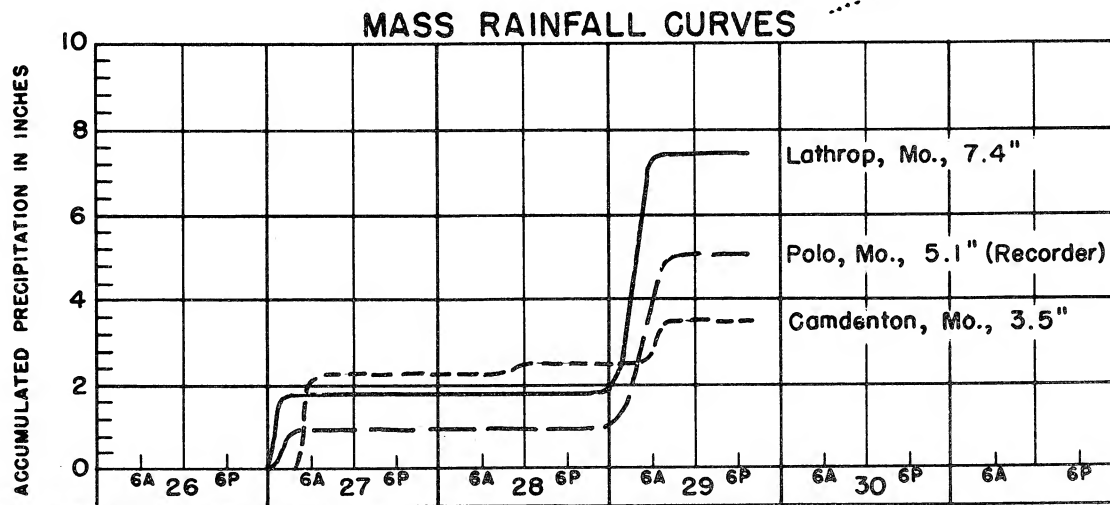
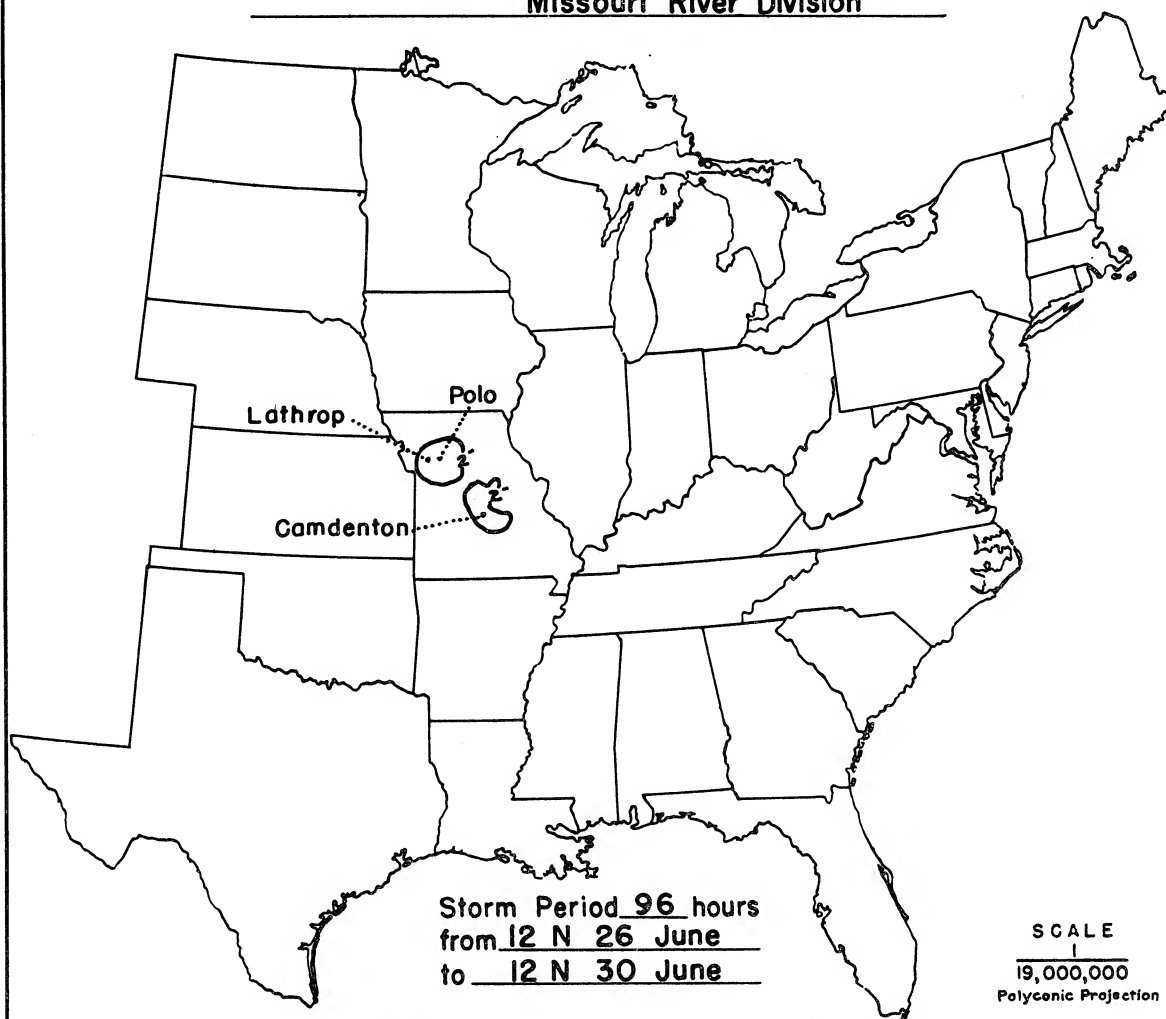
Data and computation sheets:

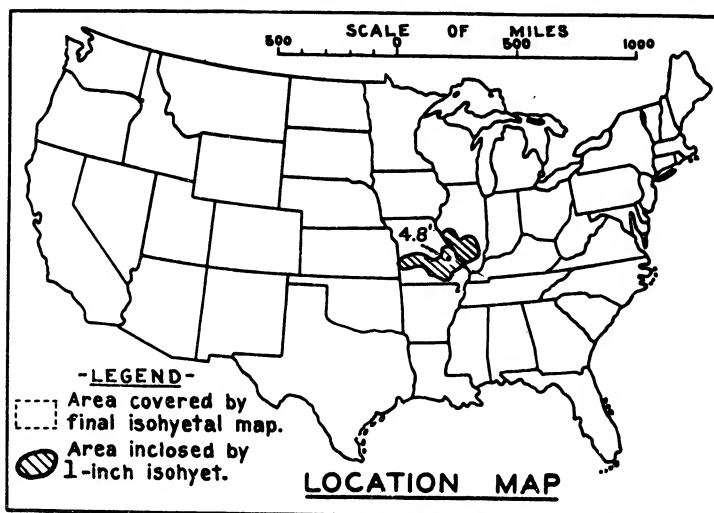
Form S-10 (Data from mass rainfall curves)----- 8
 Form S-11 (Depth-area data from isohyetal map)----- 4
 Form S-12 (Maximum depth-duration data)----- 3
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	
10	5.6	5.6	5.6	5.6	5.6	5.6	5.6	7.4	7.4	7.4	
100	5.3	5.4	5.4	5.4	5.4	5.4	5.4	7.0	7.0	7.0	
200	5.1	5.2	5.2	5.2	5.2	5.2	5.2	6.7	6.7	6.7	
500	4.5	4.6	4.6	4.6	4.6	4.6	4.6	6.0	6.0	6.0	
1000	3.9	4.1	4.1	4.1	4.1	4.1	4.1	5.2	5.2	5.2	
2000	3.1	3.3	3.3	3.3	3.3	3.3	3.3	4.8	4.8	4.8	
5000	1.9	2.2	2.3	2.3	2.3	2.3	2.4	3.0	3.0	3.1	
10000	1.2	1.5	1.7	1.7	1.7	1.8	2.0	2.4	2.5	2.6	
20000	0.8	1.1	1.2	1.2	1.2	1.4	1.8	2.0	2.1	2.3	
50000	0.6	0.9	1.0	1.0	1.0	1.2	1.6	1.7	1.8	2.1	
100000	0.5	0.8	0.9	0.9	0.9	1.1	1.4	1.5	1.5	1.9	
200000	0.4	0.6	0.7	0.7	0.7	0.9	1.1	1.2	1.2	1.5	
306000	0.3	0.5	0.6	0.6	0.6	0.7	0.9	0.9	0.9	1.2	

Storm of 26-30 June 1947 Assignment MR 8-24
Study Prepared by: Kansas City, Mo., District
Missouri River Division



STORM STUDIES - PERTINENT DATA SHEET

Storm of 30 June-1 July 1947
 Assignment MR 8-26
 Location Missouri and Illinois
 Study Prepared by:
 Lower Mississippi Valley
 Division
 St. Louis District

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54

Remarks: Center near
 Lockwood, Mo.
 Dewpoint 74° Ref. Pt.
 nr. Springfield, Mo.

DATA AND COMPUTATIONS COMPILED

GRID F-14

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)---

Form 5001-B (24-hour " ")---

Form 5001-D (" " " ")-----

Misc. precip. records, meteorological data, etc..

Form 5002 (Mass rainfall curves)-----

NOTE: This study was computed
 by the Regional Method
 which does not employ the
 Part I and Part II phases
 in their entirety.

PART II

Final isohyetal maps, in 1 sheet, scale 1:000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 8

Form S-11 (Depth-area data from isohyetal map)----- 4

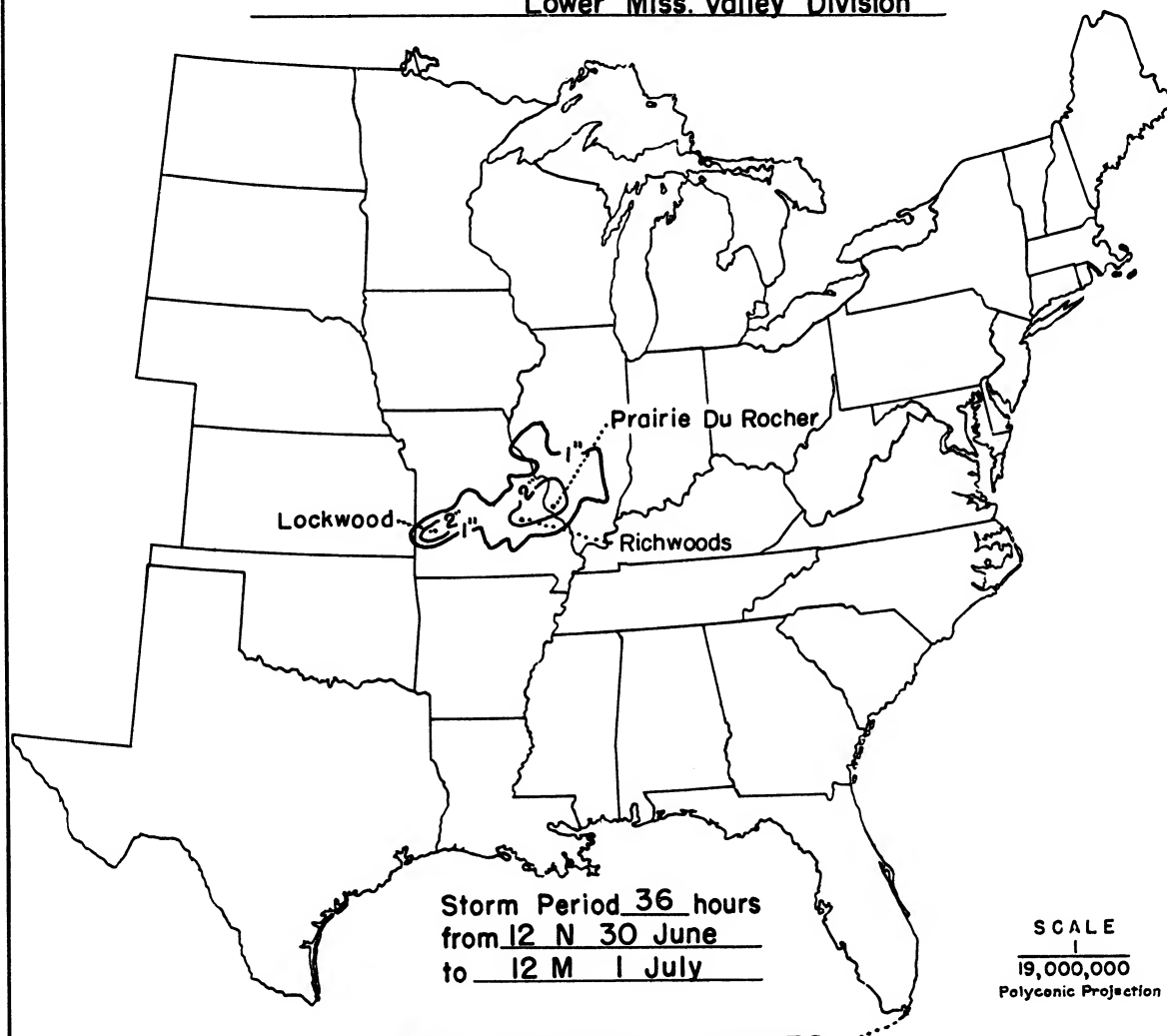
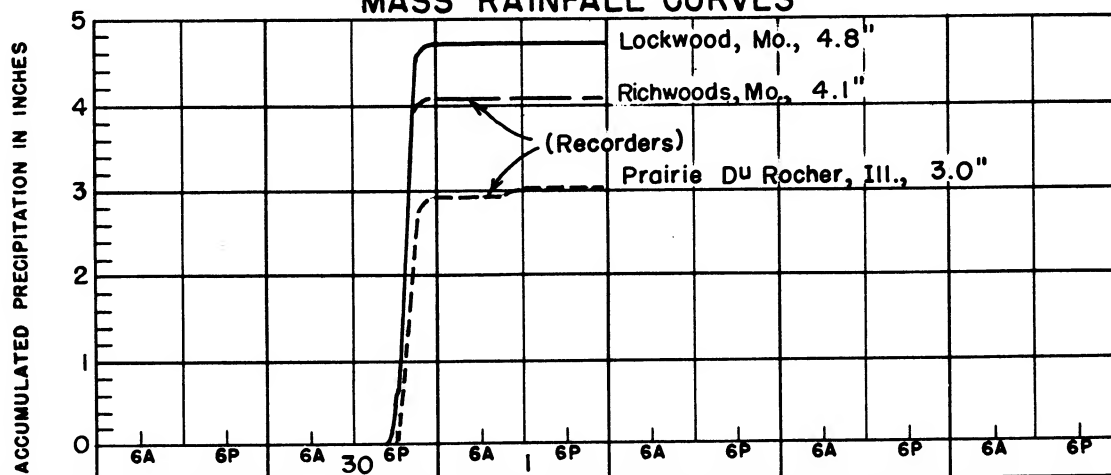
Form S-12 (Maximum depth-duration data)----- 4

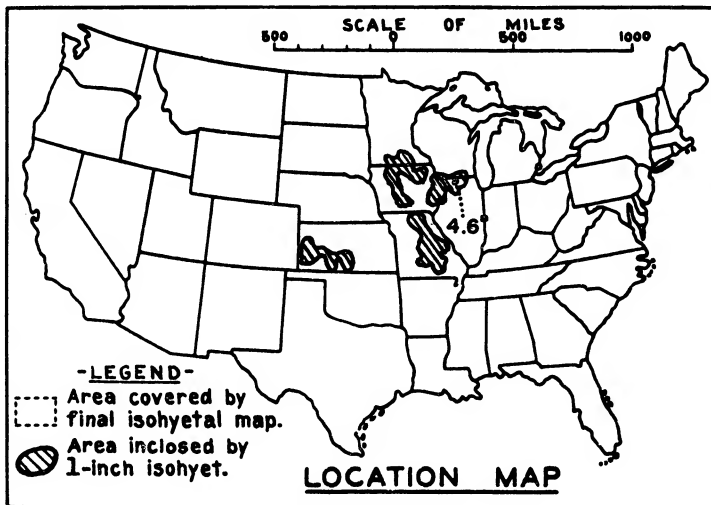
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 0

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours																		
	6	12	18	24	36														
10	4.8	4.8	4.8	4.8	4.8														
100	4.3	4.4	4.4	4.4	4.4														
200	4.0	4.1	4.1	4.1	4.1														
500	3.5	3.7	3.7	3.7	3.7														
1,000	3.2	3.3	3.4	3.4	3.4														
2,000	2.7	3.0	3.0	3.0	3.0														
5,000	2.2	2.6	2.6	2.6	2.6														
10,000	2.0	2.3	2.3	2.3	2.3														
20,000	1.7	2.1	2.1	2.1	2.1														
50,000	1.0	1.5	1.5	1.5	1.5														
100,000	0.5	0.9	0.9	0.9	0.9														
152,840	0.3	0.6	0.6	0.6	0.6														

STORM STUDIES - ISOHYETAL MAPStorm of 30 June - 1 July 1947Assignment MR 8-26Study Prepared by: St. Louis, Mo., DistrictLower Miss. Valley Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 4-6 July 1947
 Assignment MR 8-30
 Location Ill, Iowa and Mo.
 Study Prepared by:
 North Central Division
 Rock Island District

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 9/10/54
 Remarks: Center near
 Freeport, Ill.

DATA AND COMPUTATIONS COMPILED

GRID D-12

PART I

Preliminary isohyetal map, in sheet, scale

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data) --

Form 5001-B (24-hour " ")

Form 5001-D (" " " ")

Misc. precip. records, meteorological data, etc.

Form 5002 (Mass rainfall curves) -----

NOTE: This study was computed
 by the Regional Method
 which does not employ the
 Part I and Part II phases
 in their entirety.

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves) ----- 8

Form S-11 (Depth-area data from isohyetal map) ----- 5

Form S-12 (Maximum depth-duration data) ----- 6

Maximum duration-depth-area curves ----- 1

Data relating to periods of maximum rainfall ----- 0

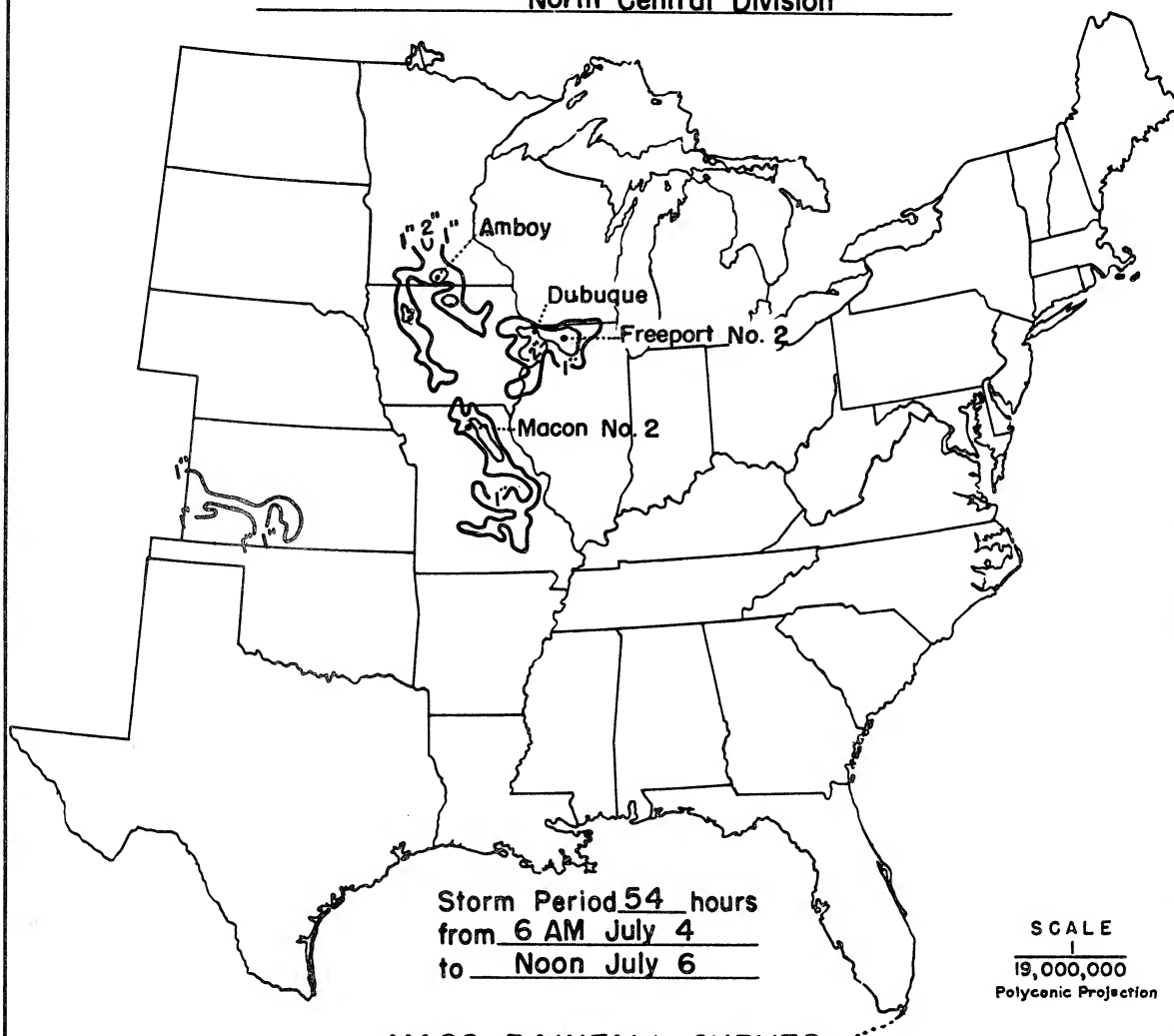
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	36	48	54			
10	4.3	4.4	4.4	4.6	4.6	4.6	4.6			
100	3.6	4.0	4.0	4.0	4.2	4.2	4.2			
200	3.4	3.7	3.7	3.8	3.9	3.9	3.9			
500	3.1	3.3	3.3	3.4	3.5	3.5	3.5			
1,000	2.7	2.9	2.9	3.0	3.1	3.1	3.1			
2,000	2.2	2.3	2.4	2.7	2.8	2.8	2.8			
5,000	1.3	1.5	1.8	2.1	2.2	2.3	2.3			
10,000	0.9	1.1	1.4	1.7	1.9	2.0	2.0			
20,000	0.6	0.8	1.1	1.4	1.6	1.7	1.7			
50,000	0.4	0.6	0.8	1.0	1.2	1.3	1.3			
100,000	0.3	0.5	0.6	0.7	0.9	1.0	1.0			
200,000	0.2	0.3	0.4	0.5	0.7	0.7	0.7			
306,000	0.1	0.2	0.2	0.3	0.4	0.4	0.4			

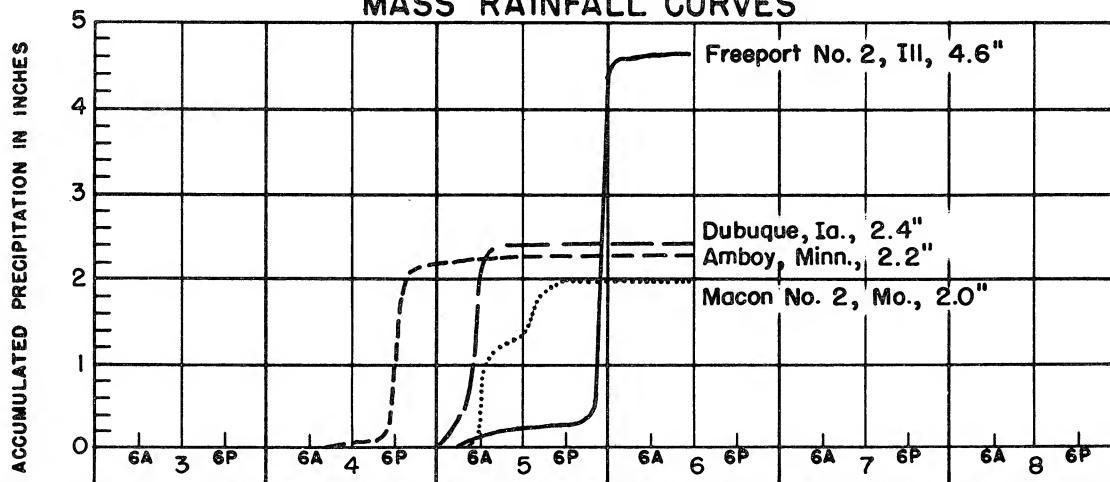
Form S-2

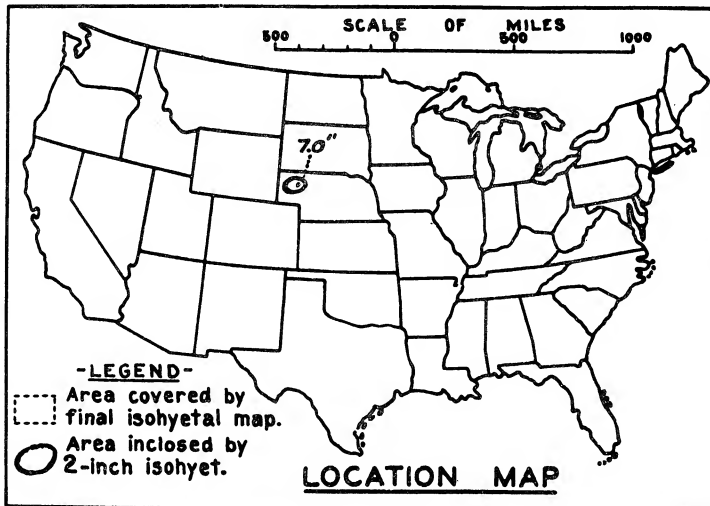
STORM STUDIES - ISOHYETAL MAP

Storm of 4-6 July 1947 Assignment MR 8-30
Study Prepared by: Rock Island, Ill., District
North Central Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 27-28 July 1951

Assignment MR 10-7

Location N. W. Nebraska

Study Prepared by:

Missouri River Division

Omaha District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/22/52Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/18/56

Remarks: Center Near

Marland, Nebr.

Dewpoint 71 . Ref. Pt.

275 SE of Marland Neb.

Grid D-19

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1" = 4 Miles

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 1

Form 5001-B (24-hour " ")----- 0

Form 5001-D (" " " ")----- 4

Misc. precip. records, meteorological data, etc.----- 3

Form 5002 (Mass rainfall curves)----- 11

PART II

Final isohyetal maps, in 1 sheet, scale 1" = 4 Miles

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 2

Form S-11 (Depth-area data from isohyetal map)----- 1

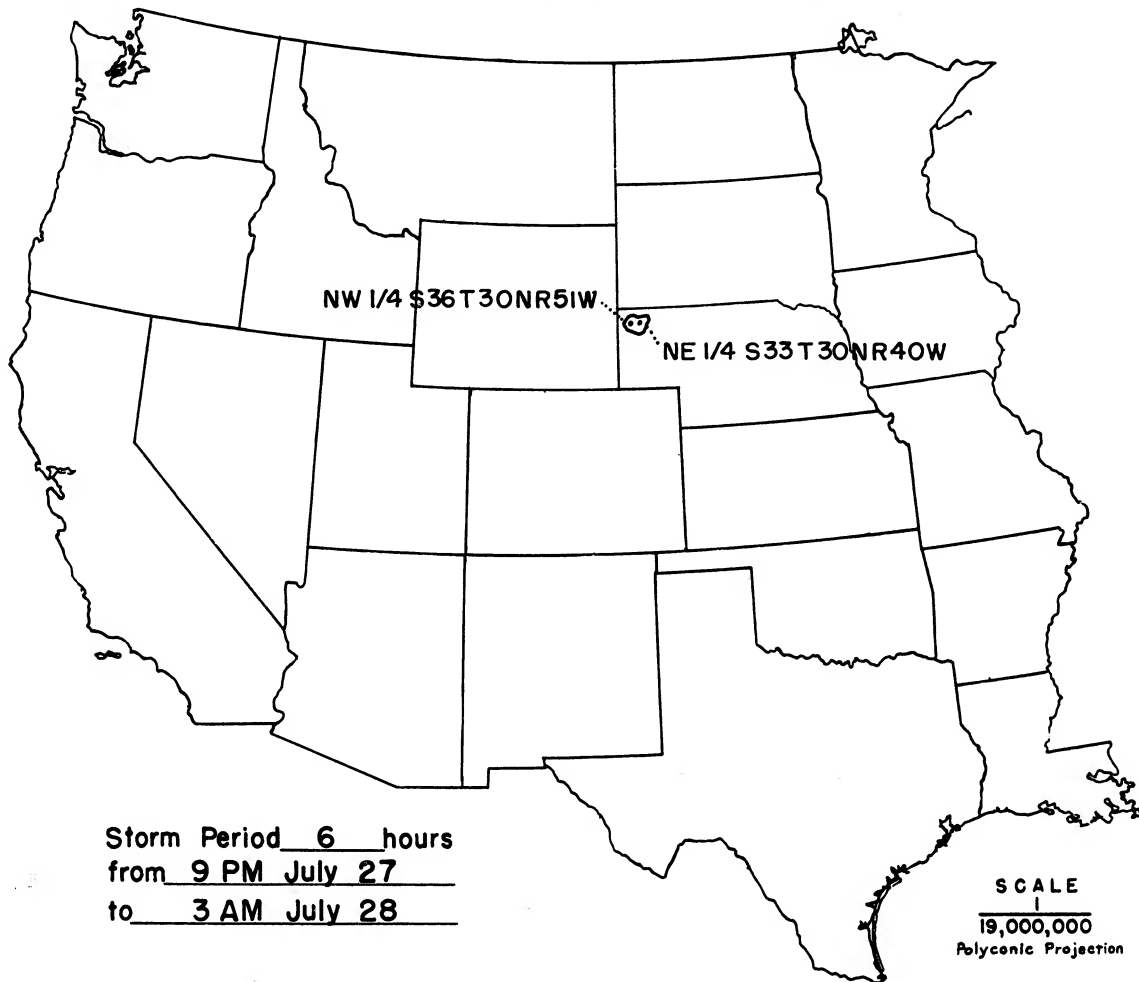
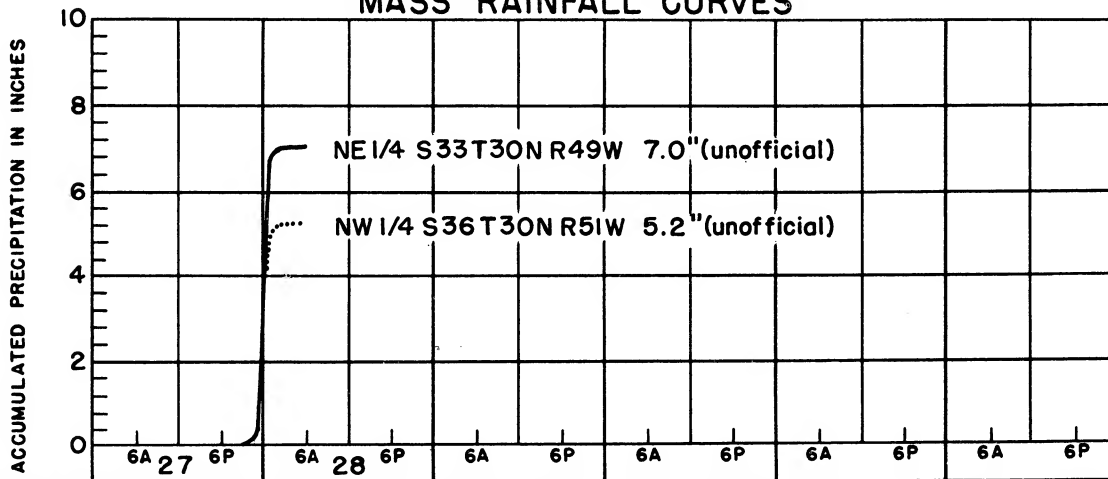
Form S-12 (Maximum depth-duration data)----- 3

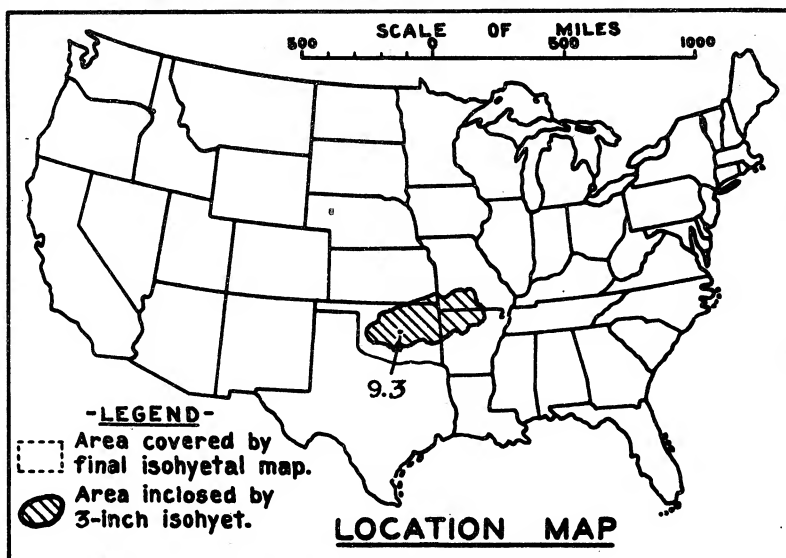
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	1	2	3	6						
Max. Station	6.1	6.9	7.0	7.0						
10	4.3	5.6	6.2	6.3						
20	3.6	5.0	5.7	5.8						
50	2.6	4.4	5.0	5.2						
100	2.0	4.0	4.5	4.7						
200	1.8	3.5	4.0	4.1						
500	1.5	3.0	3.2	3.3						
622	1.5	2.8	3.0	3.1						

STORM STUDIES - ISOHYETAL MAPStorm of 27-28 July 1951Assignment MR 10-7Study Prepared by: Omaha, Nebraska District
Missouri River Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of May 2-6, 1898
 Assignment S W 1 - 2
 Location Okla., Ark., Mo., & Kans.
 Study Prepared by:

Southwestern Division
 Tulsa District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2/12/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 8/9/45
 Remarks: Center at:
 Norman, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	6
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	10
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	11

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

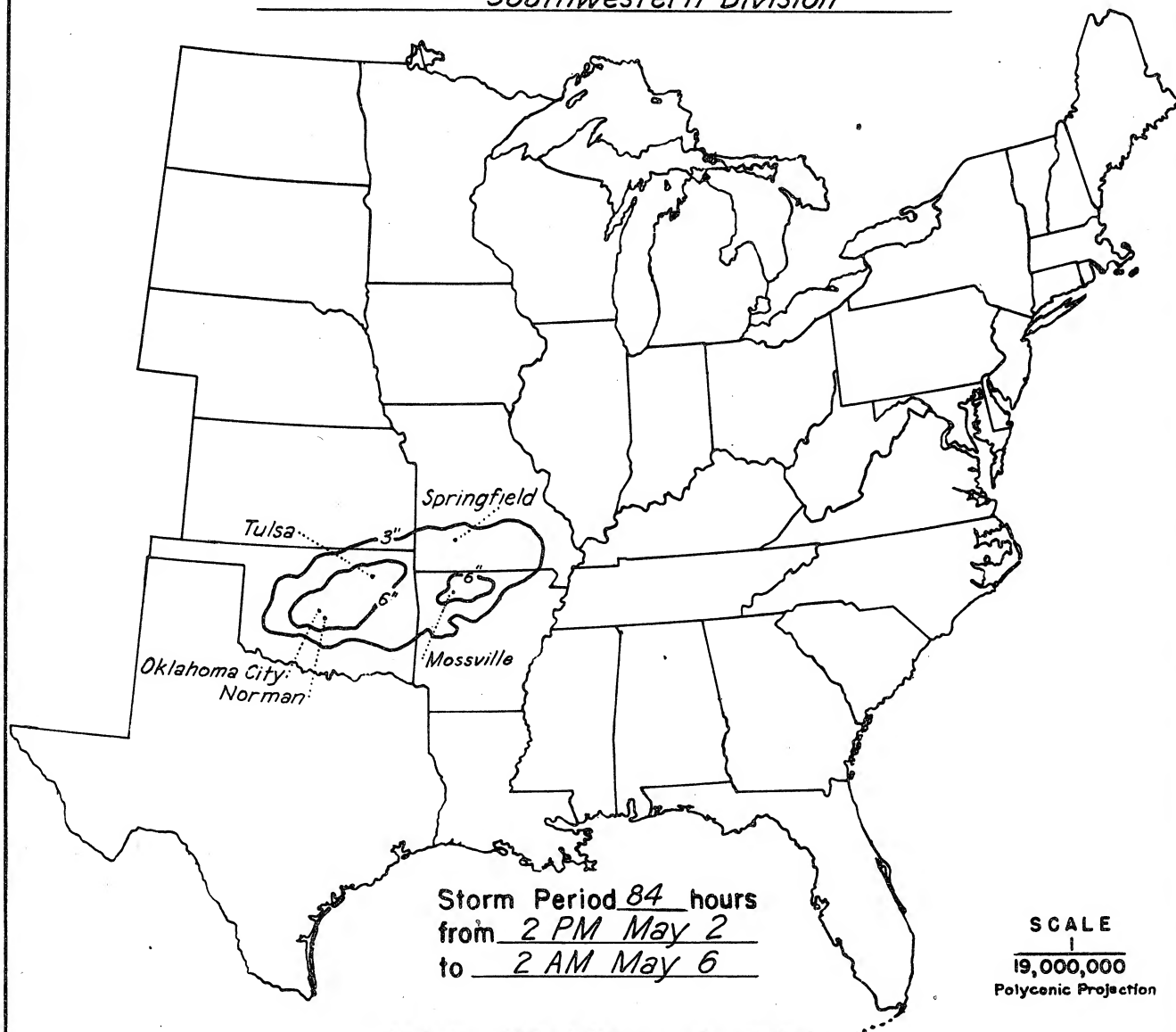
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

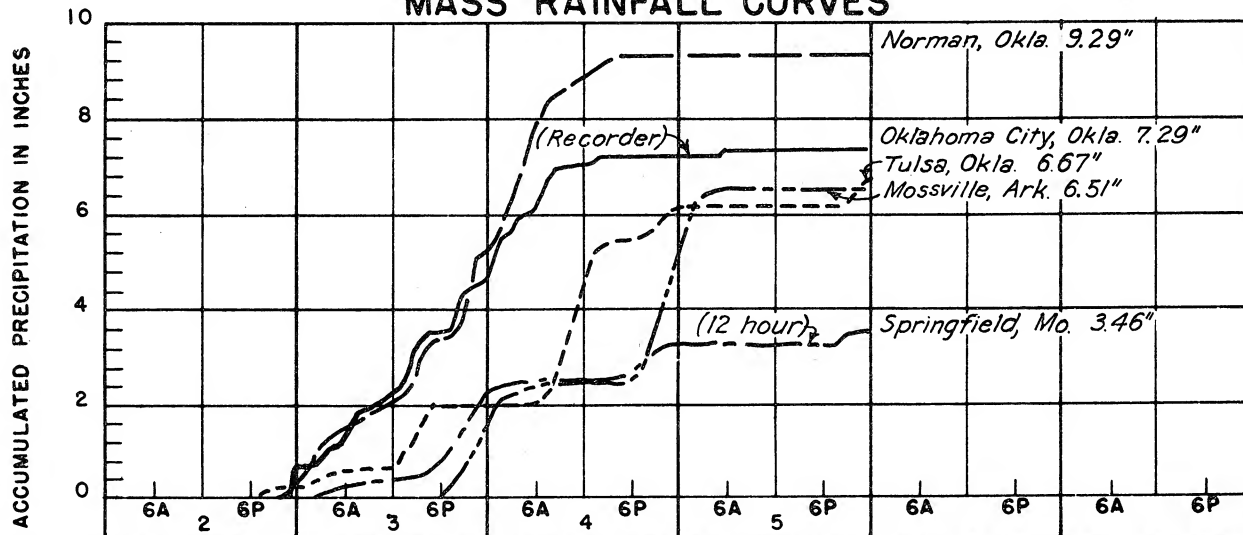
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	3.4	4.8	6.1	6.6	7.5	8.6	9.2	9.2	9.3	9.3
100	2.9	4.5	5.8	6.4	7.4	8.1	9.0	9.0	9.1	9.1
200	2.7	4.4	5.7	6.3	7.3	8.0	8.9	8.9	9.0	9.0
500	2.5	4.2	5.5	6.1	7.2	7.8	8.6	8.6	8.7	8.7
1,000	2.4	4.1	5.3	6.0	7.1	7.7	8.4	8.4	8.5	8.5
2,000	2.2	3.9	5.0	5.8	7.0	7.5	8.1	8.1	8.2	8.2
5,000	1.9	3.5	4.5	5.4	6.6	7.0	7.6	7.6	7.7	7.7
10,000	1.6	3.0	3.9	4.7	5.7	6.3	7.0	7.0	7.2	7.2
20,000	1.4	2.5	3.2	3.9	4.7	5.4	6.2	6.3	6.5	6.6
50,000	1.0	1.8	2.4	2.9	3.5	4.0	4.9	5.2	5.3	5.4
68,000	0.9	1.6	2.1	2.6	3.0	3.5	4.4	4.7	4.8	4.9

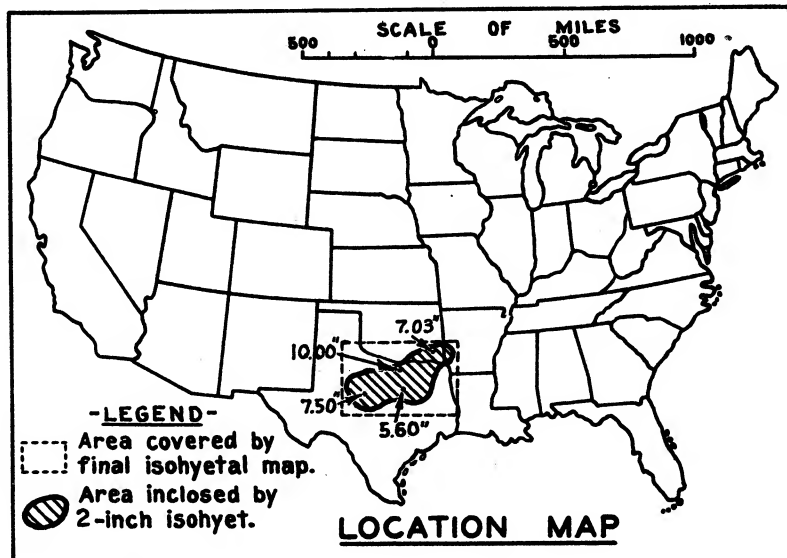
STORM STUDIES - ISOHYETAL MAP

Storm of May 2-6, 1898 Assignment SW 1-2
Study Prepared by: Tulsa, Okla. Dist
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of Sept. 28-Oct. 1, 1903

Assignment SW 1-4

Location Texas-Okla. & Ark.

Study Prepared by:

Southwestern Division

Denison District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11/7/40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/15/44

Remarks: Centers at;

Gainesville, and Coleman, Tex.
and McAlester, Oklahoma.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	0
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	11

PART II

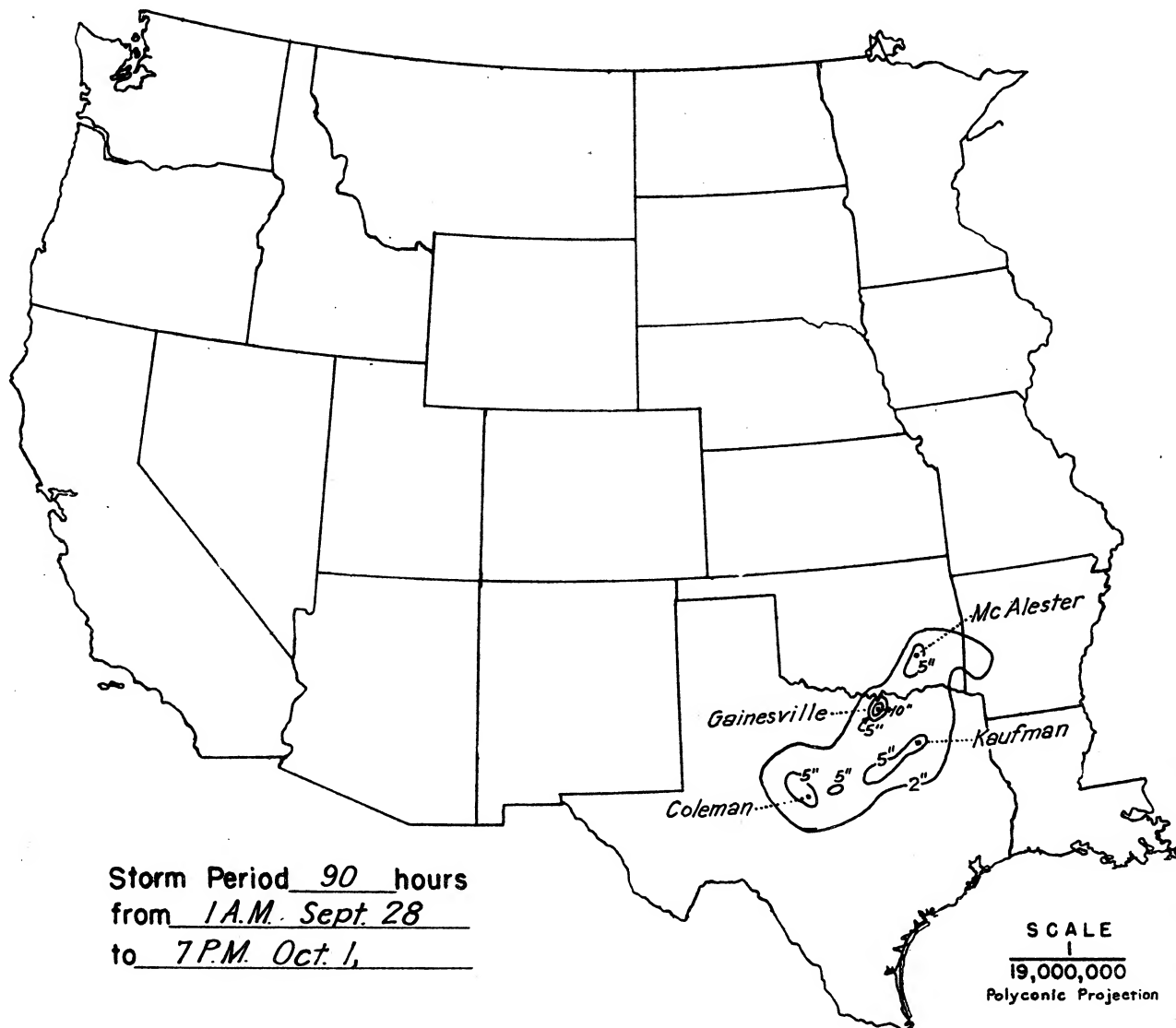
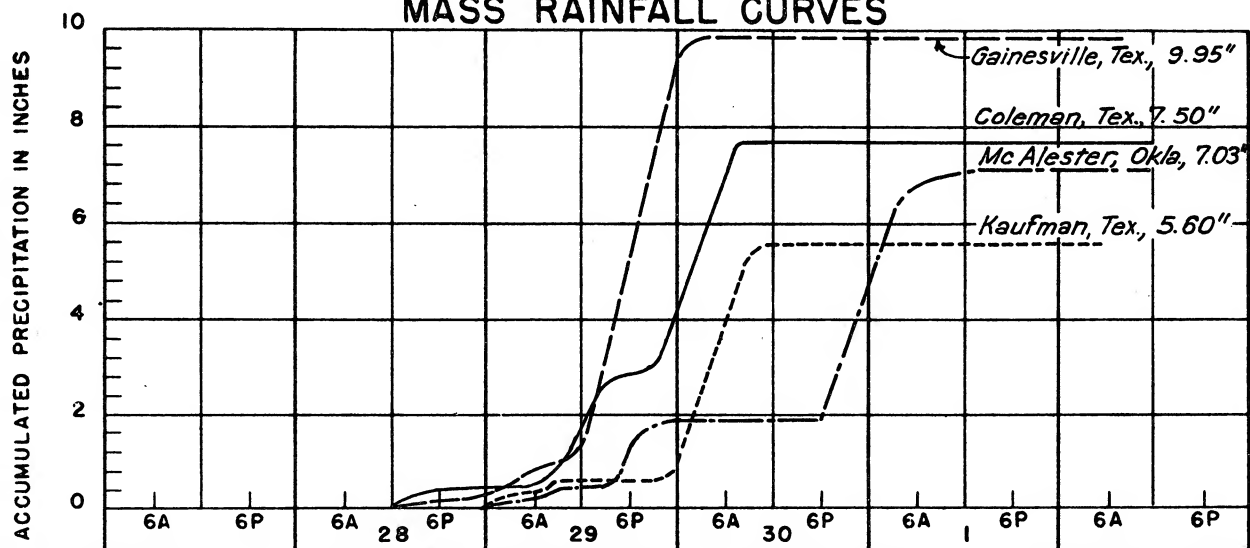
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

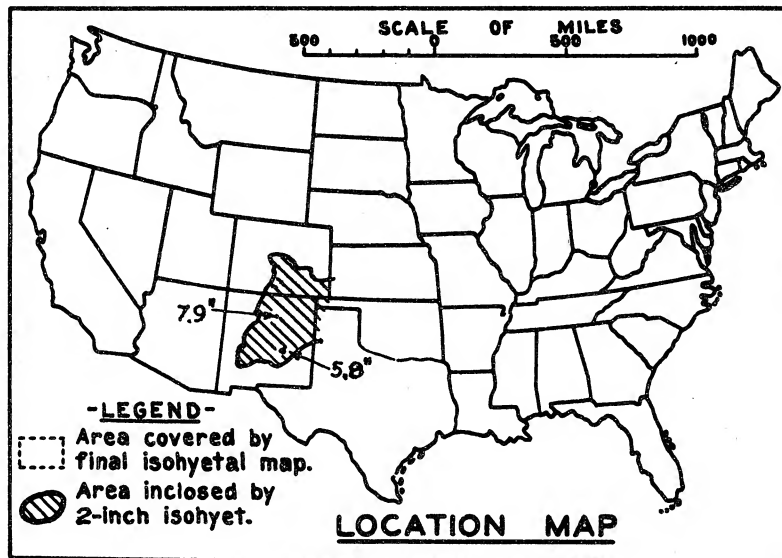
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	13
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	90
10	4.9	8.0	9.2	9.5	9.5	9.8	10.0	10.0	10.0	10.0
100	4.5	7.6	8.7	9.0	9.1	9.2	9.5	9.5	9.5	9.5
200	4.3	7.4	8.4	8.7	8.8	8.9	9.2	9.2	9.2	9.2
500	4.0	6.9	7.9	8.2	8.2	8.3	8.6	8.6	8.6	8.6
1,000	3.7	6.3	7.2	7.5	7.5	7.6	7.9	7.9	7.9	7.9
2,000	3.3	5.4	6.2	6.5	6.5	6.6	6.9	6.9	6.9	6.9
5,000	2.8	4.2	4.7	4.9	5.2	5.5	5.8	5.8	5.8	5.8
10,000	2.3	3.4	3.9	4.1	4.5	4.8	5.1	5.2	5.2	5.2
20,000	1.8	2.7	3.2	3.4	3.8	4.1	4.3	4.5	4.6	4.6
50,000	1.2	1.9	2.4	2.7	2.9	3.1	3.4	3.6	3.8	3.8

STORM STUDIES - ISOHYETAL MAPStorm of September 28-October 1, 1903 Assignment SW 1-4Study Prepared by: Denison, Texas District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 26-30, 1904

Assignment S W 1 - 6

Location N.Mex. and Colorado

Study Prepared by:

Southwestern Division

Albuquerque District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5/22/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 10/6/44

Remarks: Centers at;

Rociada, New Mexico and
Fort Stanton, New Mexico**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	7
Form 5001-B (24-hour " ").....	22
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	23

PART II

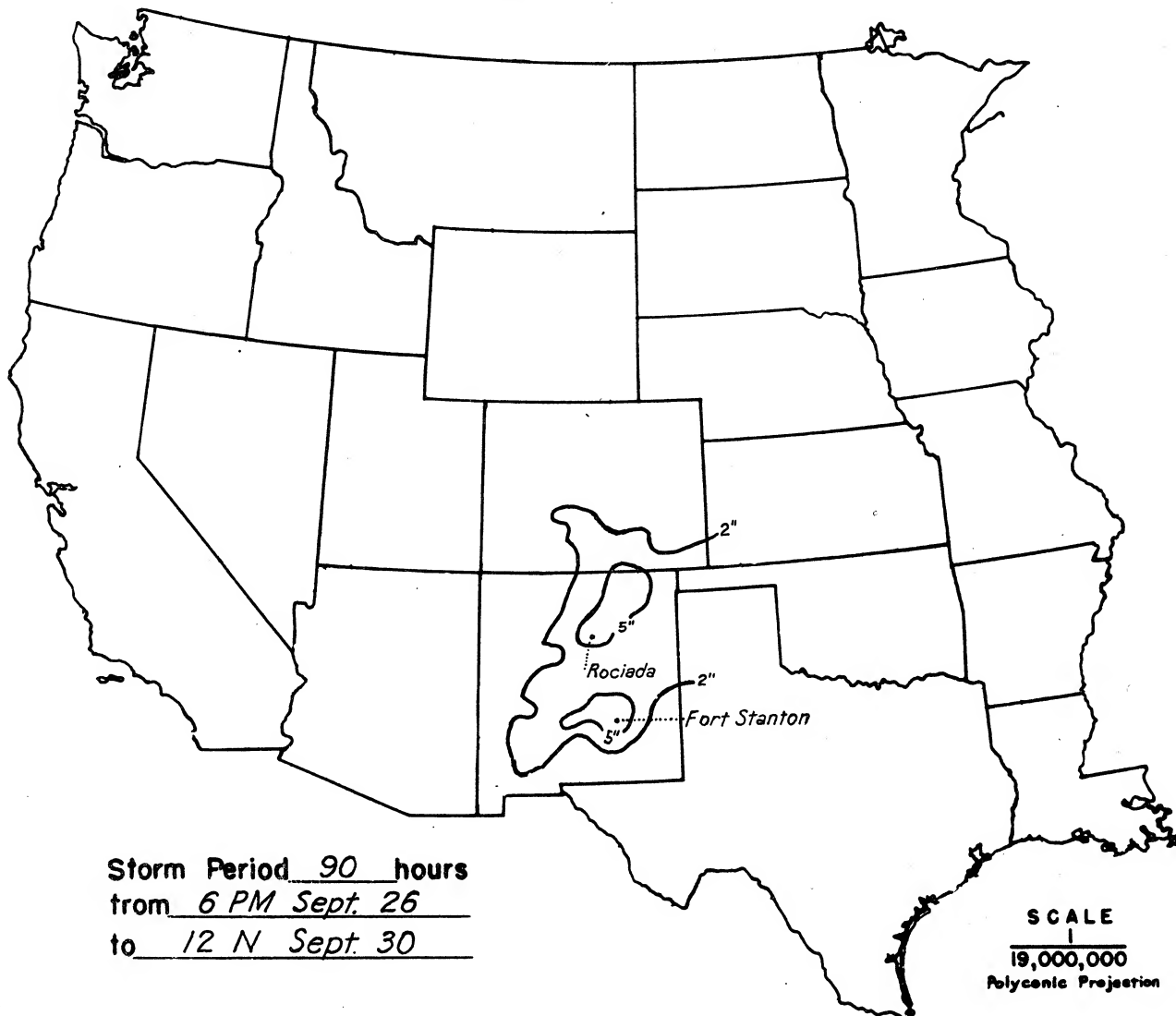
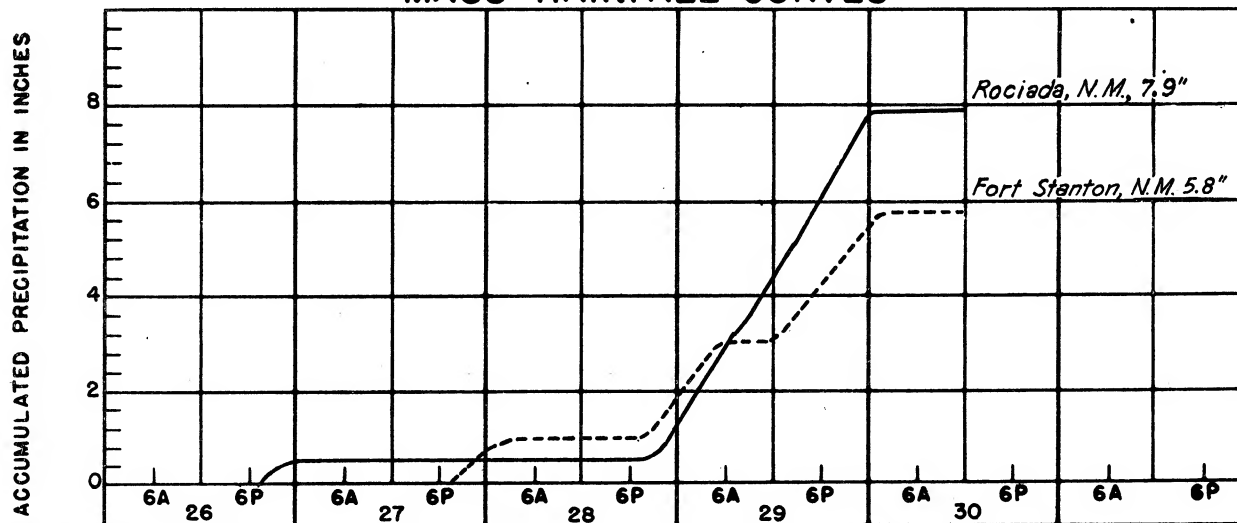
Final isohyetal maps, in 1 sheet, scale 1 : 2,500,000

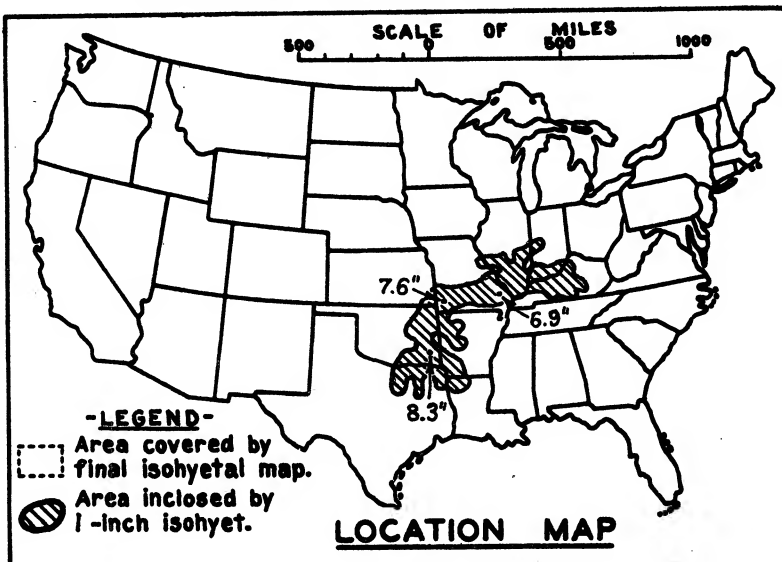
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	5
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	90	
10	3.8	4.2	5.2	6.6	7.3	7.3	7.3	7.3	7.3	7.9	
100	3.1	3.8	4.7	6.3	7.0	7.0	7.0	7.0	7.0	7.6	
200	2.9	3.7	4.6	6.2	6.8	6.8	6.9	6.9	6.9	7.5	
500	2.6	3.5	4.3	5.8	6.4	6.5	6.5	6.6	6.7	7.3	
1,000	2.4	3.3	4.1	5.4	6.1	6.2	6.4	6.4	6.5	7.2	
2,000	2.2	3.1	3.9	5.0	5.7	5.9	6.1	6.2	6.3	7.0	
5,000	1.8	2.8	3.5	4.4	5.2	5.5	5.7	5.8	6.0	6.8	
10,000	1.5	2.4	3.1	3.8	4.6	5.0	5.2	5.4	5.6	6.2	
20,000	1.3	2.0	2.7	3.3	3.9	4.3	4.5	4.8	5.0	5.4	
50,000	0.8	1.4	1.9	2.4	2.8	3.2	3.4	3.7	3.9	4.2	
70,000	0.6	1.1	1.6	2.1	2.4	2.7	2.9	3.2	3.4	3.7	

STORM STUDIES - ISOHYETAL MAPStorm of September 26-30, 1904 Assignment SW 1-6Study Prepared by: Albuquerque N. M. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 18 - 21, 1905

Assignment S W 1 - 7

Location N.E. Texas - Ky.

Study Prepared by:

Southwestern Division

Little Rock District Office

Part I Reviewed by H. M. Sec. of

Weather Bureau, 10/18/43

Part II Approved by Office, Chief

of Engineers for Distribution

of Factual Data, 3/5/45

Remarks:

TOTAL STORM AREA

Centers at ; Hartshorne, Okla.

and Lockwood and

Marble Hill, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 12

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 10

Misc. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 28

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 7

Form S-11 (Depth-area data from isohyetal map)----- 2

Form S-12 (Maximum depth-duration data)----- 16

Maximum duration-depth-area curves----- 3

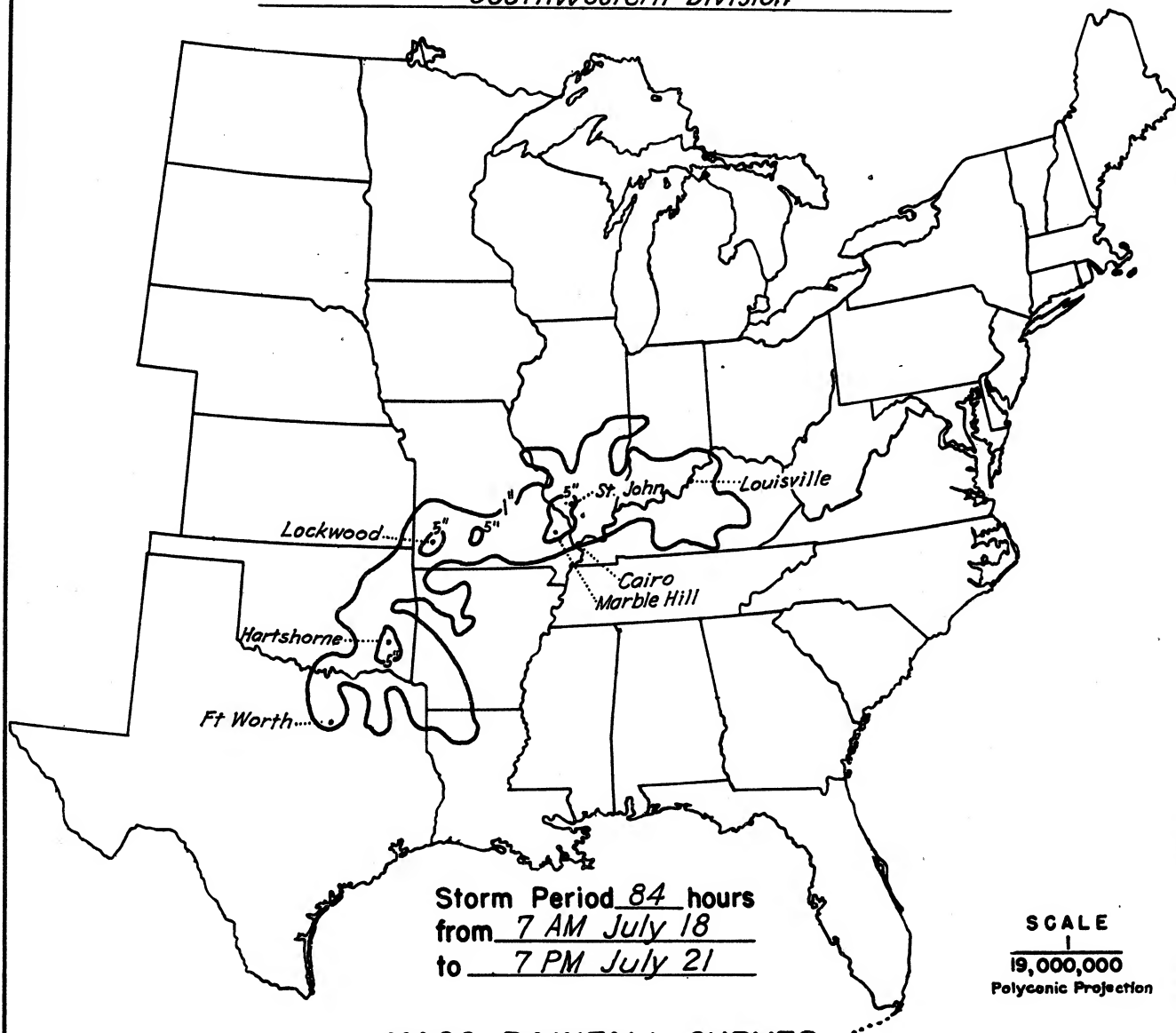
Data relating to periods of maximum rainfall----- 5

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

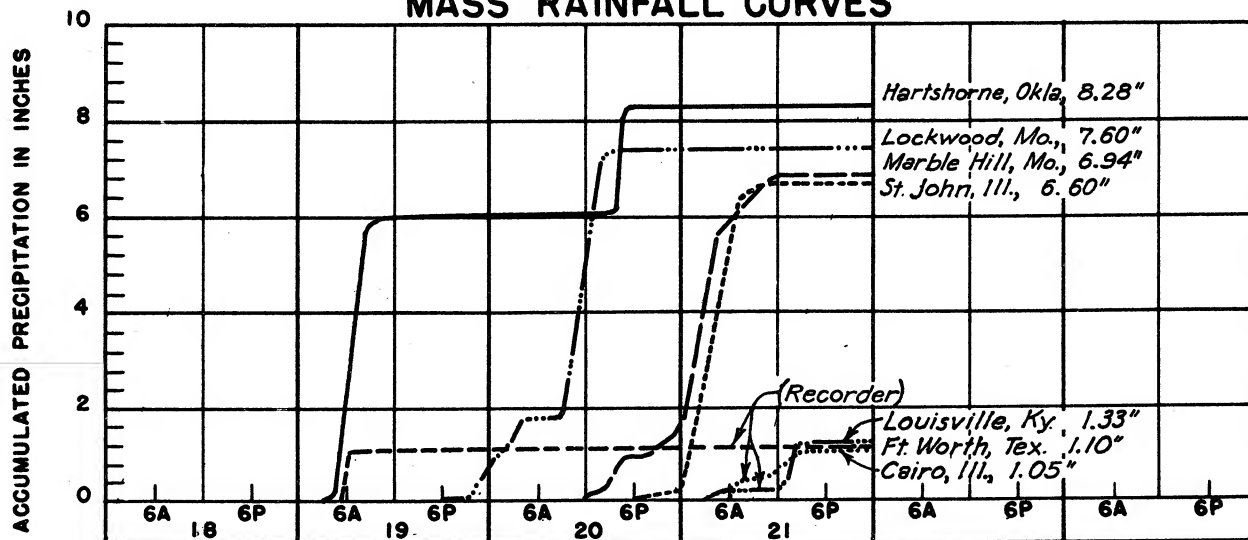
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	84	
10	5.9	6.6	7.5	7.6	7.6	7.7	8.3	8.3	8.3	8.3	
100	5.5	6.3	7.2	7.4	7.4	7.6	8.1	8.1	8.1	8.1	
200	5.4	6.1	7.0	7.3	7.3	7.5	8.0	8.0	8.0	8.0	
500	5.0	5.7	6.7	7.0	7.0	7.2	7.6	7.6	7.6	7.6	
1,000	4.6	5.3	6.4	6.8	6.8	6.9	7.3	7.3	7.3	7.3	
2,000	4.2	4.8	5.9	6.4	6.4	6.6	6.8	6.8	6.8	6.8	
5,000	3.6	4.1	5.1	5.6	5.6	5.8	6.0	6.0	6.0	6.0	
10,000	3.1	3.6	4.5	4.9	4.9	5.0	5.3	5.3	5.3	5.3	
20,000	2.5	2.9	3.7	4.0	4.0	4.2	4.4	4.4	4.4	4.4	
50,000	1.6	2.0	2.5	2.8	2.9	3.0	3.2	3.3	3.3	3.3	
75,000	1.2	1.5	1.9	2.2	2.3	2.5	2.7	2.8	2.8	2.9	
100,000	0.9	1.1	1.5	1.7	1.9	2.1	2.3	2.4	2.5	2.6	

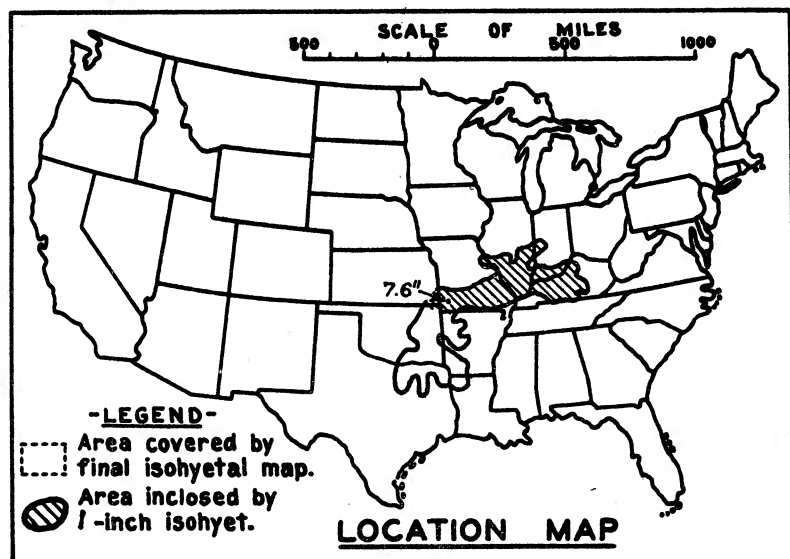
STORM STUDIES - ISOHYETAL MAP

Storm of July 18-21, 1905 Assignment SW 1-7
Study Prepared by: Little Rock, Ark., District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 18 - 21, 1905
 Assignment S W 1 - 7 (a)
 Location Mo. - Ky.

Study Prepared by:

Southwestern Division

Little Rock District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/18/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/5/45

Remarks:

NORTHERN AREA ONLY

Centers at; Lockwood, Mo. and
 Marble Hill, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	12
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	10
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	28

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

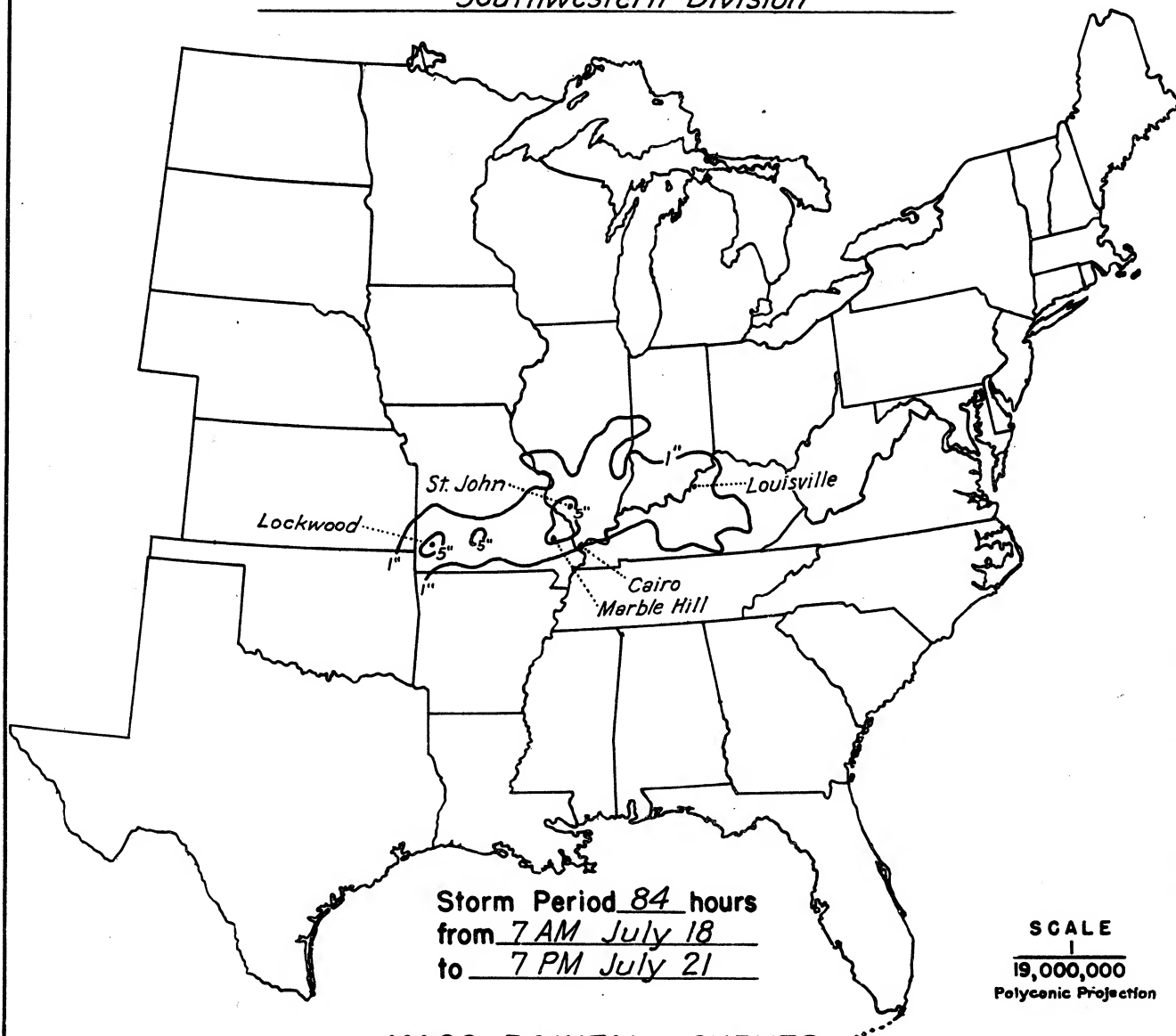
Form S-10 (Data from mass rainfall curves)-----	7
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	16
Maximum duration-depth-area curves-----	3
Data relating to periods of maximum rainfall-----	5

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

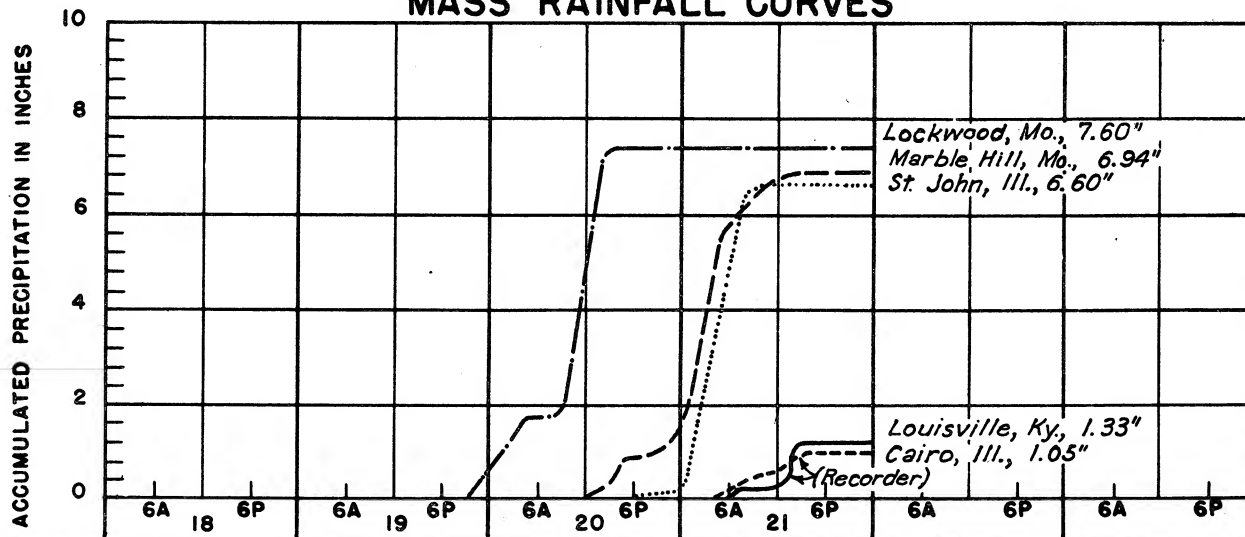
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	5.7	6.6	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6
100	5.6	6.3	7.2	7.4	7.4	7.4	7.4	7.4	7.4	7.4
200	5.4	6.1	7.0	7.3	7.3	7.3	7.3	7.3	7.3	7.3
500	5.0	5.7	6.7	7.0	7.0	7.0	7.0	7.0	7.0	7.0
1,000	4.6	5.3	6.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8
2,000	4.2	4.8	5.9	6.4	6.4	6.4	6.4	6.4	6.4	6.4
5,000	3.5	4.1	5.1	5.6	5.6	5.6	5.6	5.6	5.6	5.6
10,000	2.9	3.4	4.3	4.9	4.9	5.0	5.1	5.1	5.1	5.1
20,000	2.2	2.6	3.4	3.9	4.0	4.2	4.4	4.4	4.4	4.4

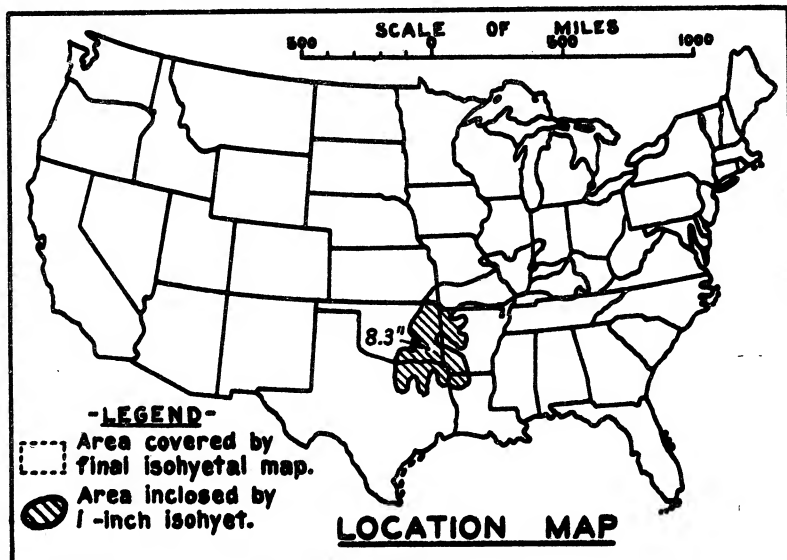
STORM STUDIES - ISOHYETAL MAP

Storm of July 18-21, 1905 Assignment SW 1-7 (a)
Study Prepared by: Little Rock, Ark. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 18 - 21, 1905
 Assignment S W 1 - 7 (b)
 Location Okla. Texas Ark.
 Study Prepared by:

Southwestern Division
 Little Rock District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/18/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/5/45

Remarks: SOUTHERN AREA ONLY
 Center at; Hartshorne, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	12
Form 5001-B (24-hour " " " ").....	-
Form 5001-D (" " " " " ").....	10
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	28

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

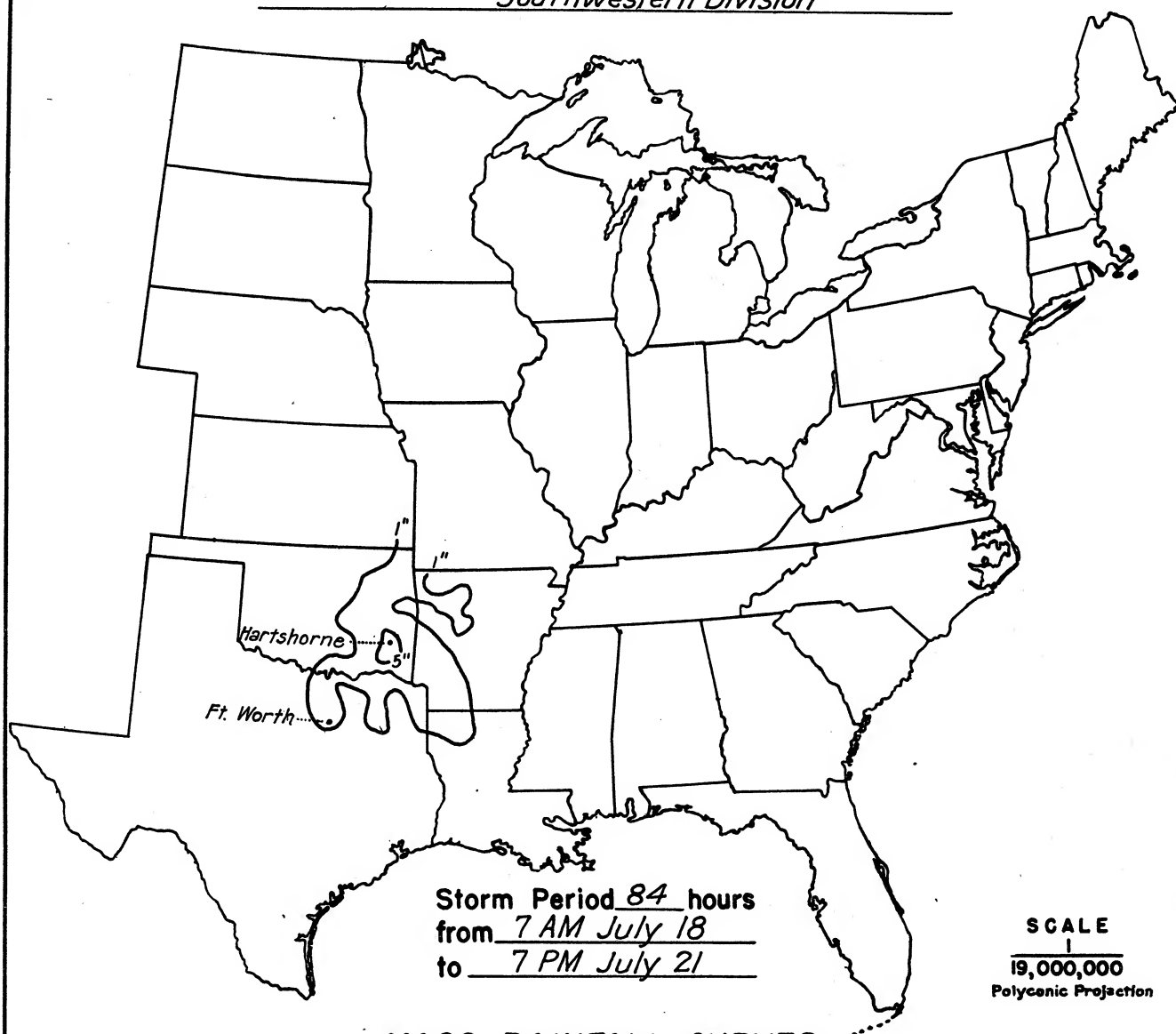
Form S-10 (Data from mass rainfall curves).....	7
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	16
Maximum duration-depth-area curves.....	3
Data relating to periods of maximum rainfall.....	5

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

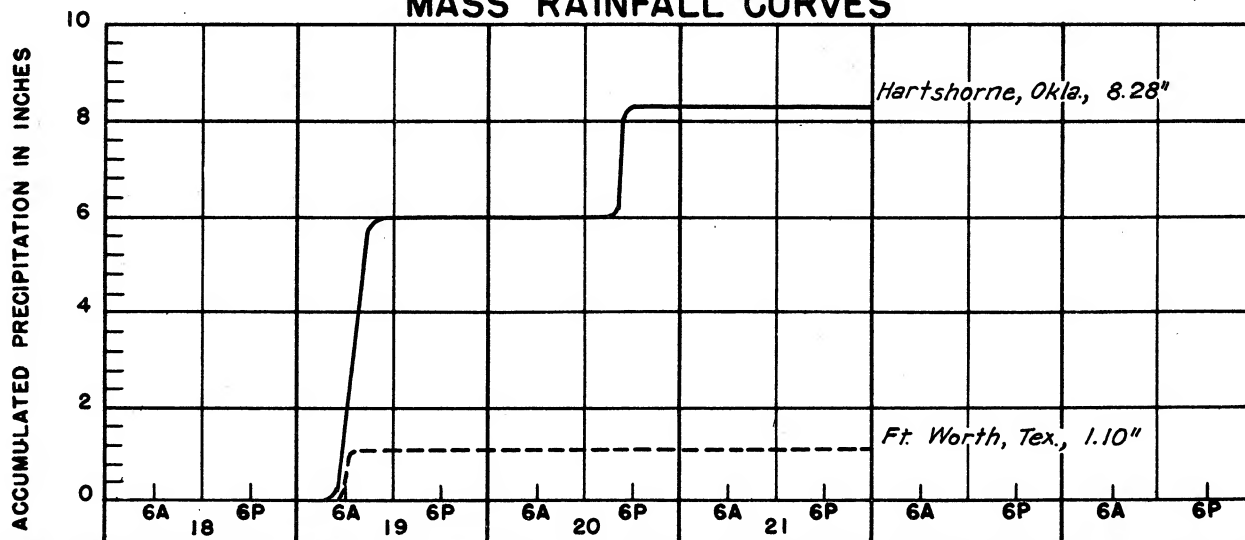
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	5.9	6.0	6.0	6.0	6.0	7.7	8.3	8.3	8.3	8.3
100	5.5	5.9	5.9	5.9	5.9	7.3	8.1	8.1	8.1	8.1
200	5.2	5.8	5.8	5.8	5.8	7.0	8.0	8.0	8.0	8.0
500	4.7	5.5	5.5	5.5	5.5	6.5	7.6	7.6	7.6	7.6
1,000	4.2	5.1	5.1	5.1	5.1	5.9	7.1	7.1	7.2	7.2
2,000	3.6	4.6	4.6	4.6	4.6	5.2	6.4	6.5	6.6	6.6
5,000	2.8	3.8	3.8	3.8	4.0	4.2	5.3	5.4	5.5	5.6
10,000	2.1	3.0	3.0	3.1	3.2	3.4	4.3	4.4	4.5	4.7
20,000	1.5	2.1	2.1	2.4	2.5	2.6	3.2	3.6	3.7	3.8

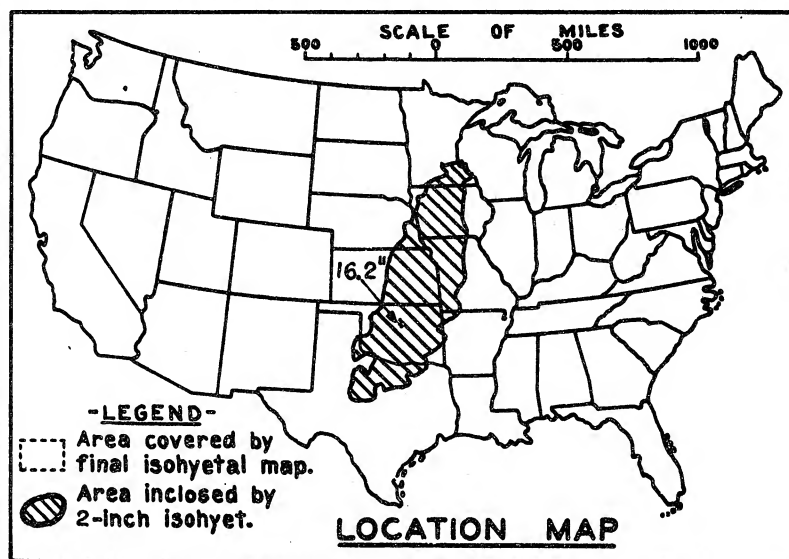
STORM STUDIES - ISOHYETAL MAP

Storm of July 18-21, 1905 Assignment SW 1-7(b)
Study Prepared by: Little Rock, Ark., District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 19-24, 1908

Assignment S W 1 - 11

Location Okla., Tex., -Ia.

Study Prepared by:

Southwestern Division

Tulsa District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11-12-40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7-15-45

Remarks: Center at:

Keeker, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	22
Form 5001-B (24-hour " ")-----	—
Form 5001-D (" " " ")-----	28
Misc. precip. records, meteorological data, etc.-----	—
Form 5002 (Mass rainfall curves)-----	35

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

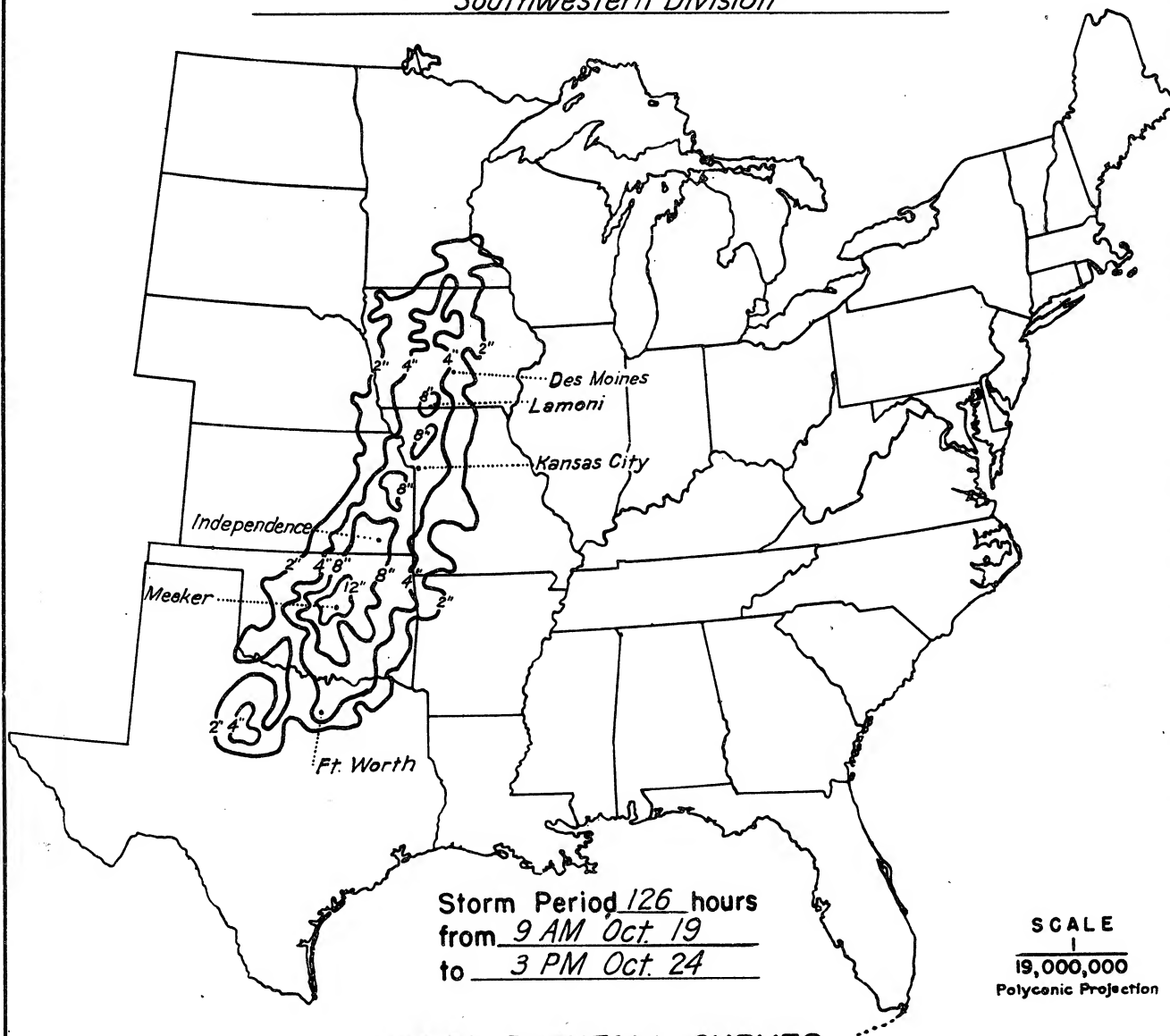
Form S-10 (Data from mass rainfall curves)-----	10
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

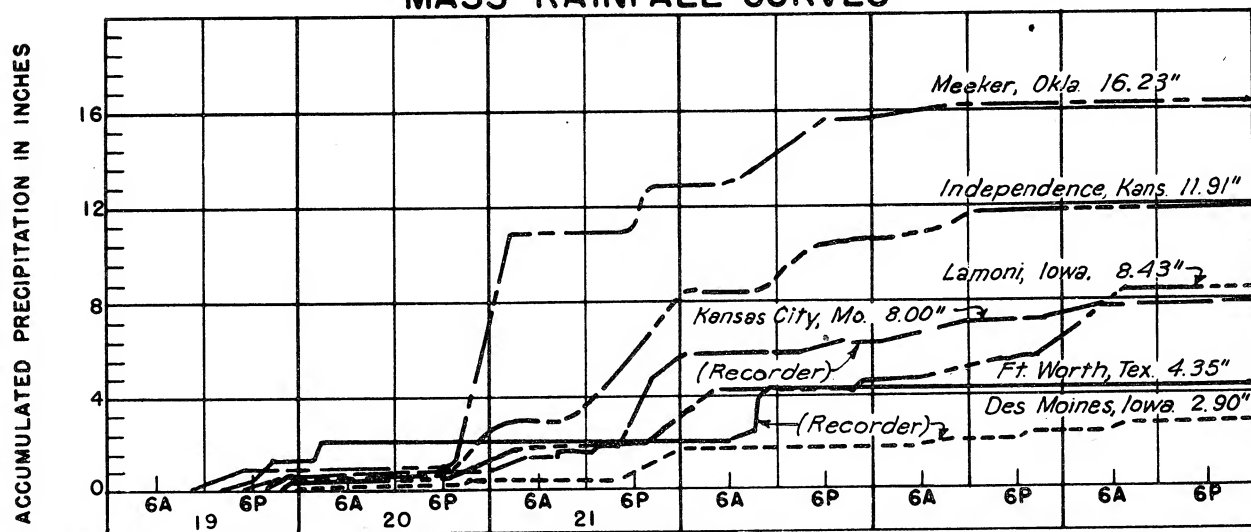
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	90	126
10	9.4	10.0	10.0	11.4	11.8	12.0	14.5	14.9	15.2	15.8	16.2
100	8.2	9.3	9.4	10.3	11.3	11.5	13.6	14.4	14.9	15.4	15.9
500	7.1	8.4	8.5	9.2	10.5	10.7	13.2	13.8	14.2	14.6	15.1
1,000	6.3	7.5	7.7	8.6	9.9	10.2	12.7	13.3	13.7	14.0	14.5
2,000	5.5	6.6	6.8	7.8	9.0	9.4	11.9	12.5	12.9	13.3	13.7
5,000	4.4	5.4	5.7	6.6	7.6	8.2	10.5	11.3	11.7	12.1	12.5
10,000	3.5	4.5	4.8	5.6	6.4	7.1	9.2	10.0	10.6	11.0	11.4
20,000	2.7	3.6	3.9	4.6	5.3	5.9	7.7	8.6	9.0	9.6	10.1
50,000	1.6	2.4	2.8	3.4	3.8	4.3	5.6	6.2	6.6	7.2	8.0
80,000	1.0	1.7	2.1	2.7	3.0	3.4	4.4	4.9	5.4	5.9	6.8

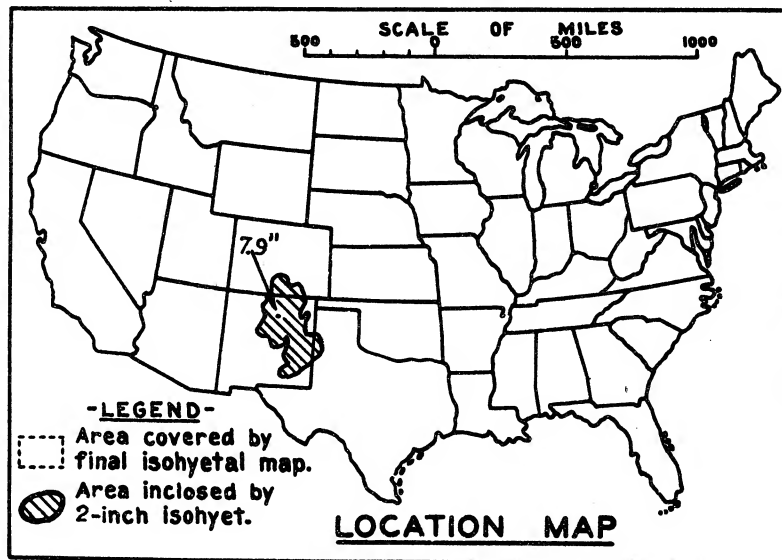
STORM STUDIES - ISOHYETAL MAP

Storm of October 19-24, 1908 Assignment SW 1-11
 Study Prepared by: Tulsa, Okla. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 6 - 12, 1913

Assignment S W 1 - 14

Location New Mexico

Study Prepared by:

 Southwestern Division
 Albuquerque District Office

 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 4/21/44

 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/6/44

Remarks: Centers at;

 Fort Union, N. Mex., Raton,
 N. Mex., and Portales, N. Mex.
DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	4
Form 5001-B (24-hour " ")-----	42
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	21

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

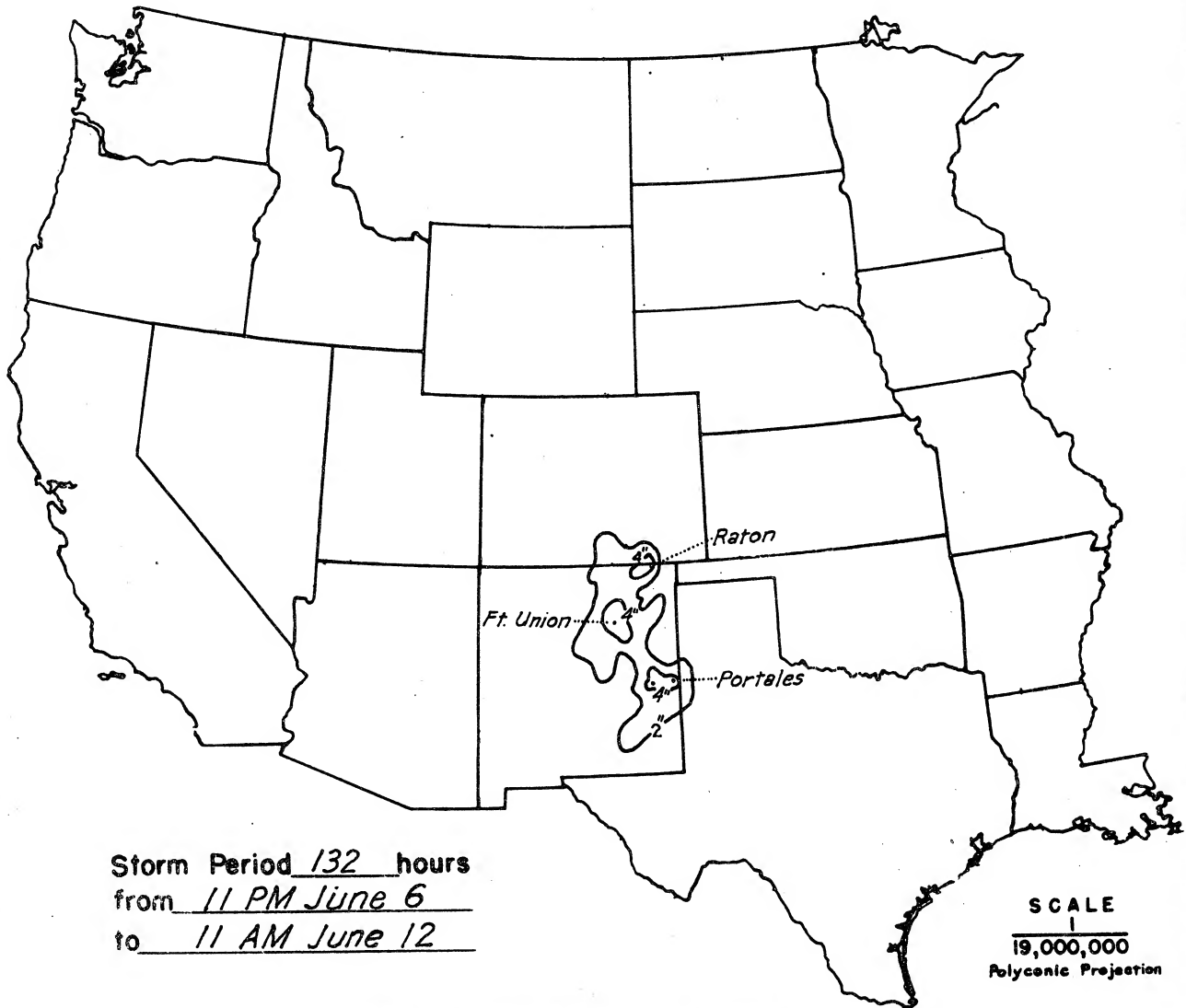
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

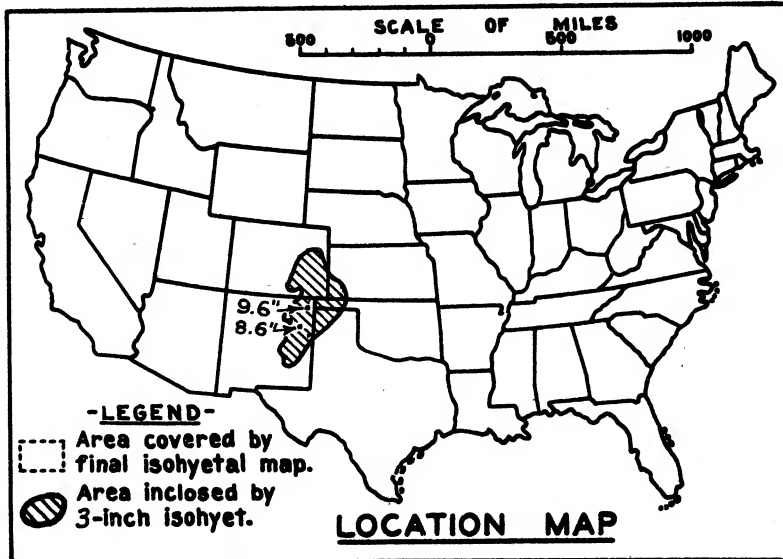
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	132
10	4.3	5.0	5.0	5.1	5.4	5.4	6.0	6.5	6.7	7.9	7.9
100	3.5	4.7	4.9	4.9	5.0	5.0	5.6	6.2	6.5	7.5	7.6
200	3.3	4.6	4.7	4.8	4.9	4.9	5.5	6.0	6.3	7.3	7.4
500	3.0	4.2	4.4	4.5	4.6	4.6	5.1	5.6	5.9	6.8	7.0
1,000	2.7	3.9	4.1	4.2	4.2	4.2	4.8	5.1	5.4	6.2	6.5
2,000	2.3	3.4	3.6	3.6	3.8	3.8	4.3	4.5	4.8	5.5	6.0
5,000	1.8	2.6	2.7	2.8	3.0	3.1	3.5	3.7	3.9	4.5	5.0
10,000	1.3	1.8	2.0	2.1	2.4	2.5	2.8	3.0	3.2	3.7	4.3
20,000	0.7	1.1	1.2	1.3	1.7	1.9	2.0	2.2	2.5	2.8	3.5
23,000	0.5	0.9	1.0	1.1	1.5	1.7	1.9	2.1	2.3	2.6	3.3

STORM STUDIES - ISOHYETAL MAP

Storm of June 6-12 1913 Assignment SW 1-14
Study Prepared by: Albuquerque, N.M. District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of April 29,-May 2, 1914
 Assignment S W 1 - 16
 Location N Mex., Colo., & Kan.
 Study Prepared by:

Southwestern Division
 Albuquerque District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/7/14

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/6/14

Remarks: Centers at;
 Clayton, Pleasant View, and
 Nara Visa, New Mexico

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	7
Form 5001-B (24-hour " ").....	57
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	30

PART II

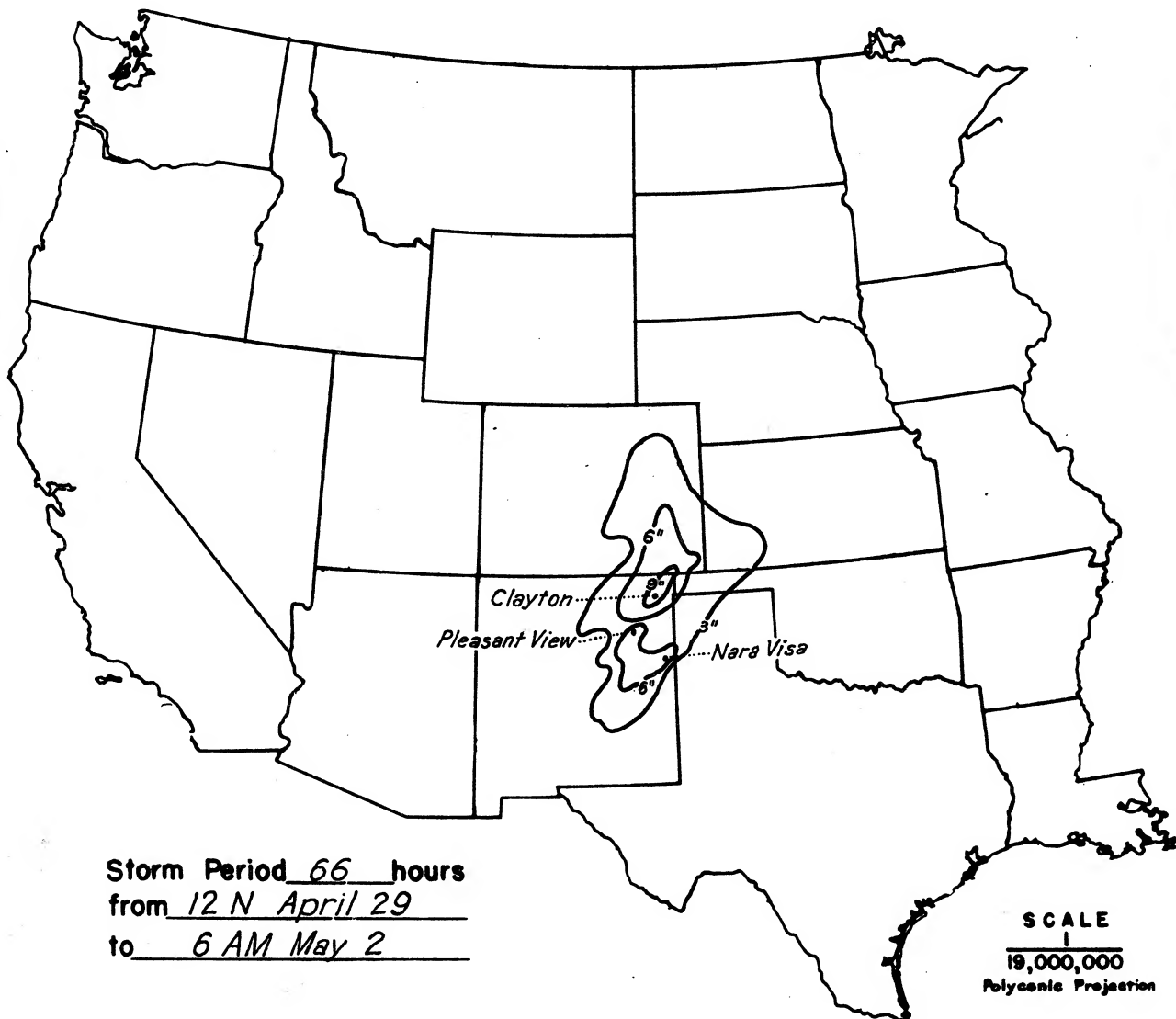
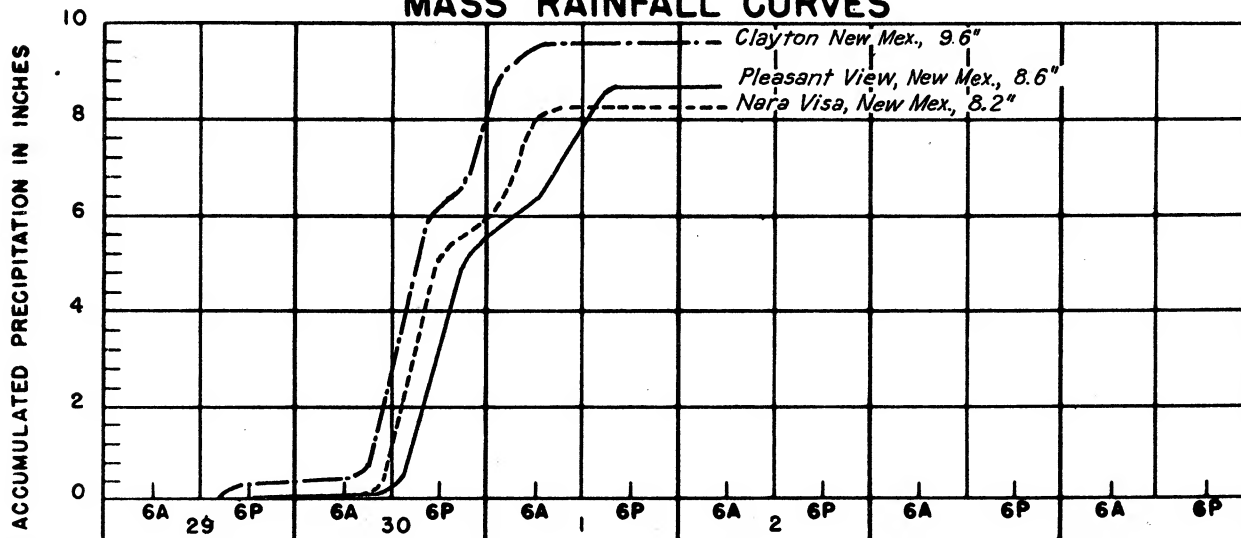
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

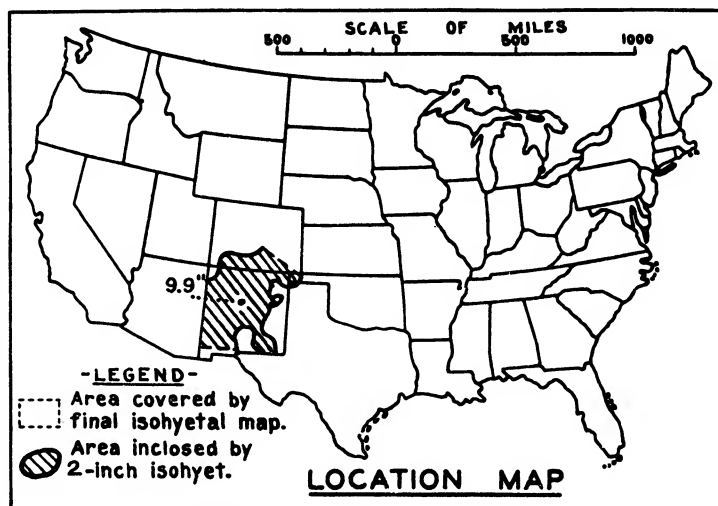
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	9
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	66		
10	5.3	6.8	8.6	9.0	9.0	9.0	9.6	9.6	9.6		
100	4.8	6.7	8.2	8.8	8.9	8.9	9.4	9.4	9.4		
200	4.6	6.5	8.0	8.7	8.8	8.8	9.3	9.3	9.3		
500	4.2	6.2	7.8	8.3	8.5	8.5	9.0	9.0	9.0		
1,000	3.9	5.8	7.4	7.9	8.2	8.2	8.7	8.7	8.7		
2,000	3.5	5.0	6.7	7.2	7.6	7.6	8.1	8.1	8.1		
5,000	2.8	3.8	5.4	6.2	6.6	6.8	7.3	7.3	7.3		
10,000	2.0	3.0	4.5	5.2	5.8	6.0	6.5	6.5	6.5		
20,000	1.4	2.3	3.5	4.2	4.9	5.1	5.6	5.6	5.6		
36,500	1.0	1.8	2.5	3.3	3.9	4.1	4.5	4.6	4.6		

STORM STUDIES - ISOHYETAL MAPStorm of April 29 - May 2, 1914 Assignment SW-1-16Study Prepared by: Albuquerque, N. M. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 19-28 July 1915

Assignment SW 1-18

Location N. M., Colo., Okla.

Study Prepared by:

Southwestern Division
Albuquerque DistrictPart I Reviewed by H. M. Sec. of
Weather Bureau, 5/20/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/22/57Remarks: Center at Tajique,
New Mexico

Grid H-20

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	12
Form 5001-B (24-hour " ")-----	54
Form 5001-D (" " " ")-----	0
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	59

PART II

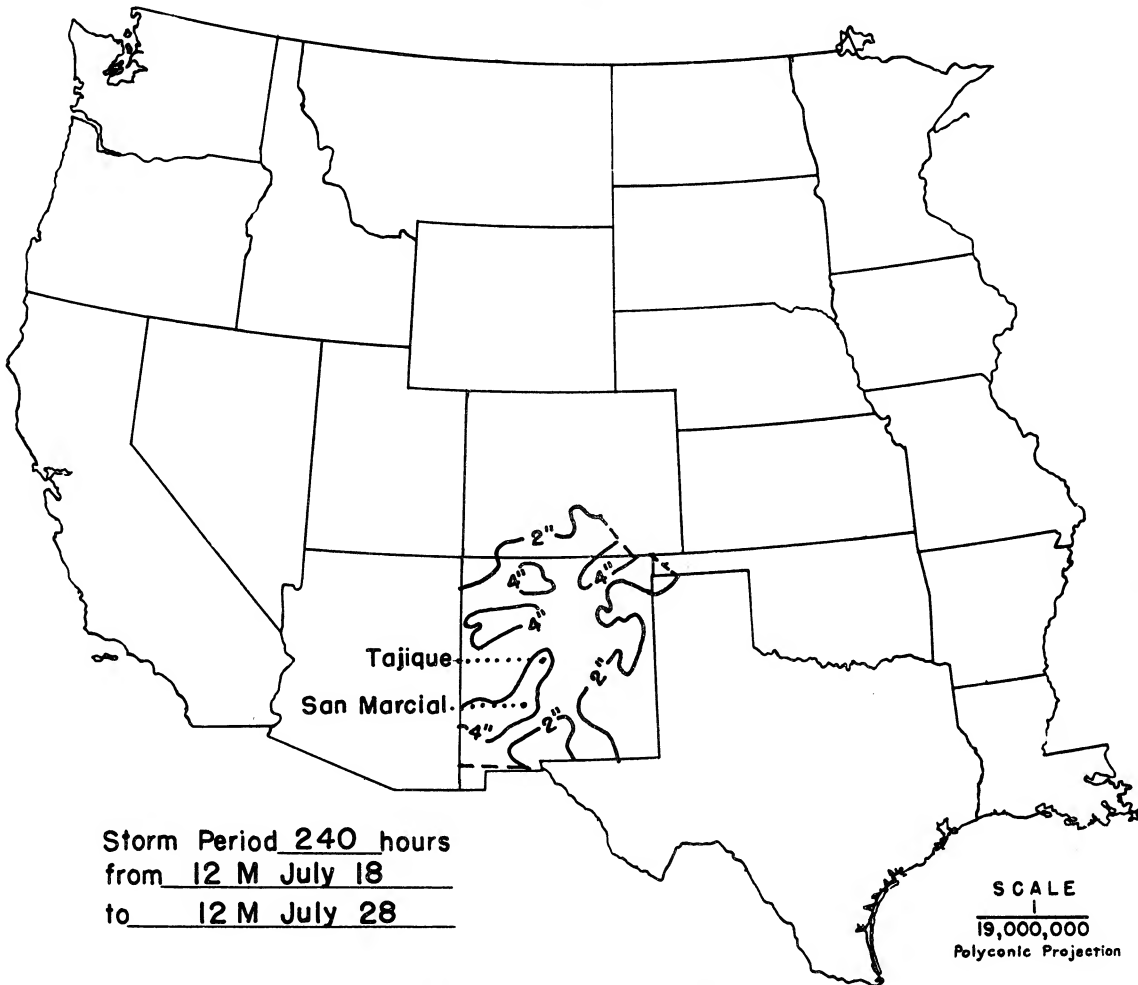
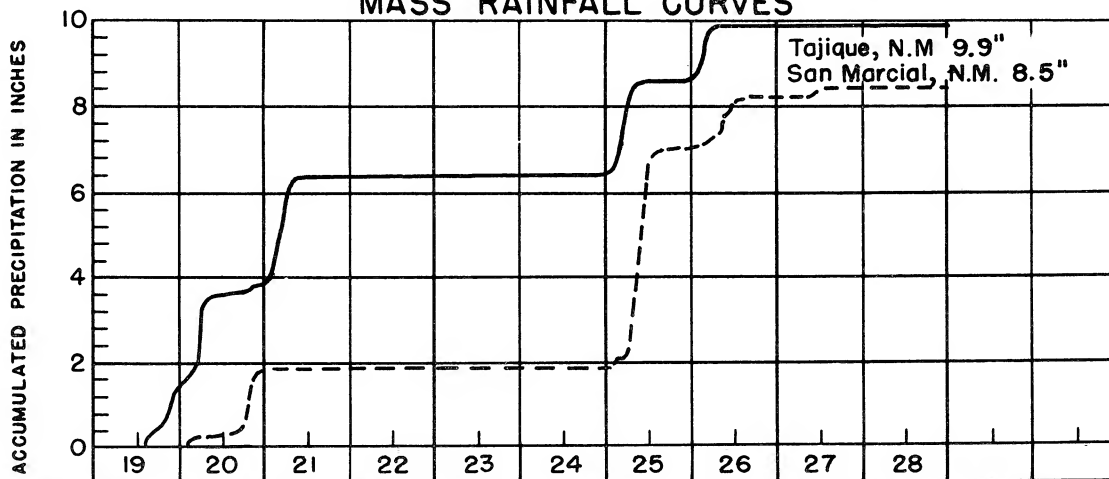
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

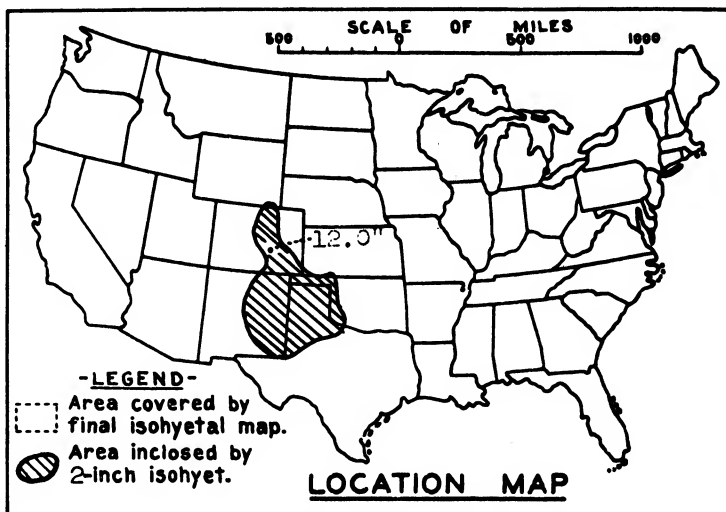
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	20
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	72	96	120	150	240
10	4.6	4.9	5.1	5.2	6.2	6.2	6.5	6.5	7.3	9.3	9.9
100	4.5	4.8	5.0	5.0	6.0	6.0	6.4	6.4	7.1	8.3	9.0
200	4.4	4.7	4.9	4.9	5.8	5.8	6.2	6.2	6.9	8.0	8.6
500	4.1	4.3	4.6	4.6	5.5	5.5	5.8	5.8	6.5	7.4	8.1
1,000	3.6	3.8	4.1	4.1	5.0	5.0	5.3	5.3	6.0	6.9	7.6
2,000	2.7	3.0	3.3	3.3	4.0	4.1	4.5	4.5	5.4	6.3	7.2
5,000	1.7	2.1	2.4	2.4	2.8	3.0	3.4	3.7	4.5	5.6	6.4
10,000	1.2	1.5	1.9	1.9	2.2	2.5	2.9	3.2	3.8	5.0	5.8
20,000	0.8	1.1	1.5	1.5	1.8	2.1	2.5	2.7	3.1	4.3	5.3
50,000	0.4	0.7	1.0	1.0	1.3	1.6	1.9	2.1	2.4	3.3	4.3
95,000	0.3	0.5	0.8	0.8	1.0	1.2	1.5	1.8	2.0	2.5	3.5

STORM STUDIES - ISOHYETAL MAPStorm of 19-28 July 1915 Assignment SW 1-18Study Prepared by: Albuquerque, N.Mex. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 2-6 June 1921

Assignment SW 1-23

Location Colo. -N. Mex. -Tex. -Kans

Study Prepared by:

Southwestern Division

Albuquerque District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 17 July 1946Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 18 Mar. 1960Remarks: Center near Pueblo,
Colorado, Dewpt. 67°, Ref.
Pt. 400 SE.

Grid F-19

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,300,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	77
Form 5001-D (" " " ")-----	1
Misc. precip. records, meteorological data, etc.---	---
Form 5002 (Mass rainfall curves)-----	49

PART II

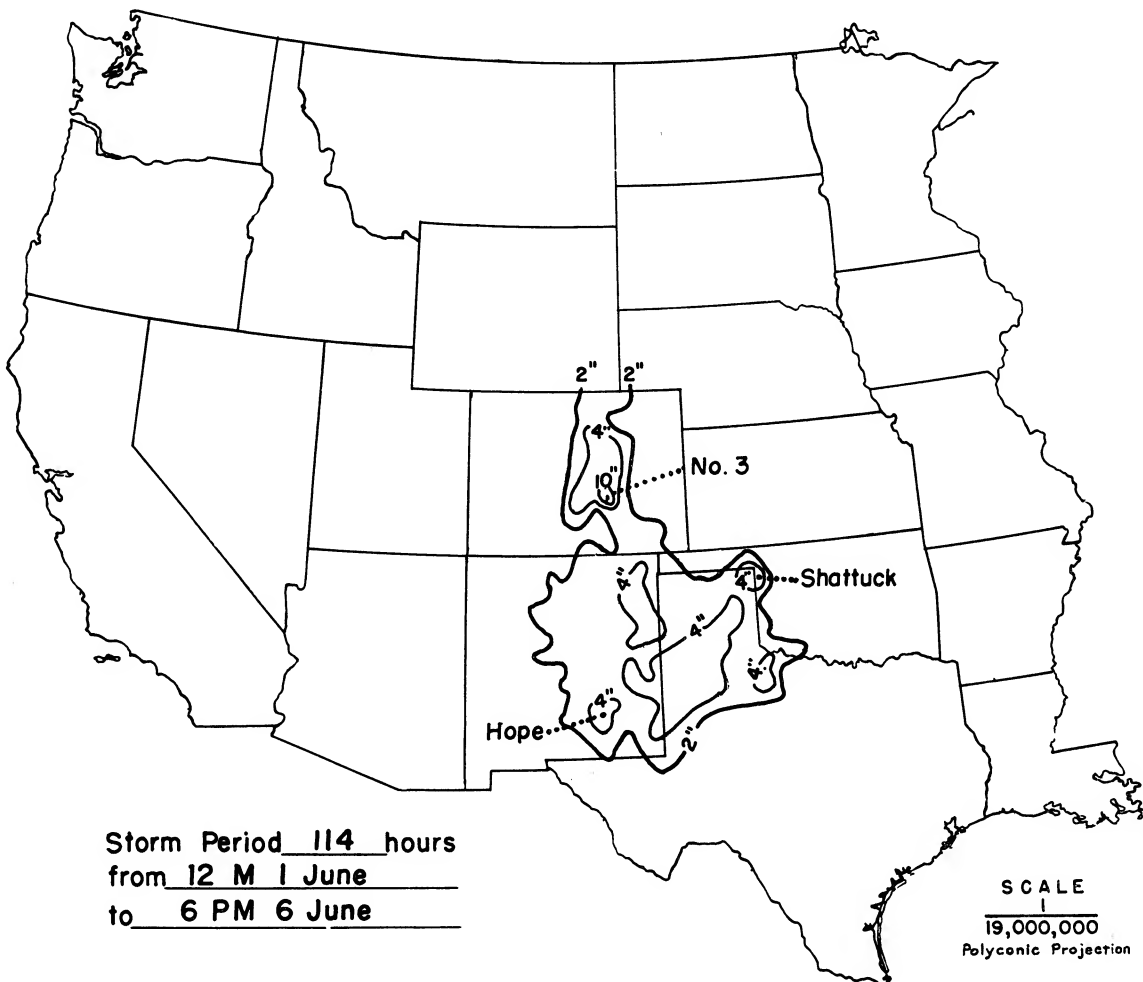
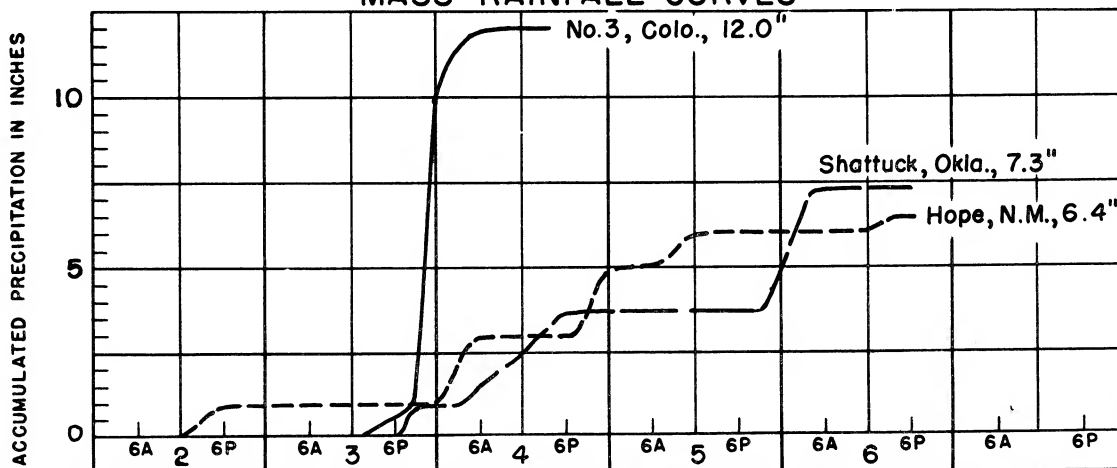
Final isohyetal maps, in 1 sheet, scale 1:1,300,000

Data and computation sheets:

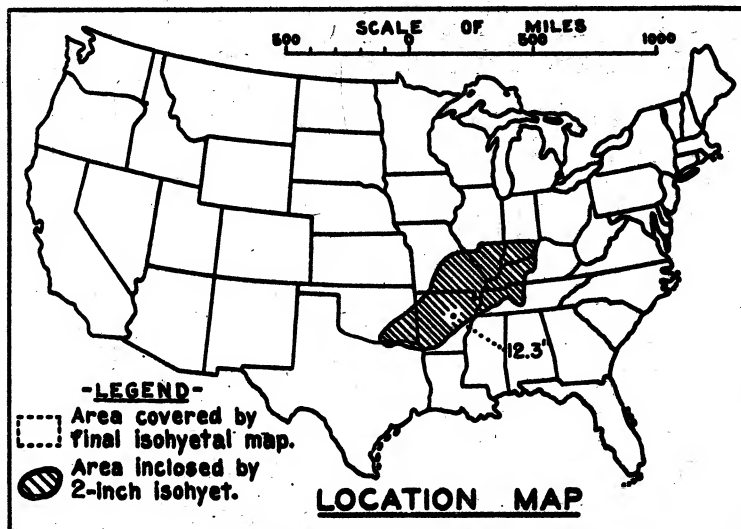
Form S-10 (Data from mass rainfall curves)-----	6
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	10.4	11.3	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
100	8.8	10.4	11.0	11.1	11.1	11.1	11.2	11.2	11.2	11.2	11.2
200	7.9	9.7	10.3	10.4	10.4	10.5	10.7	10.7	10.7	10.7	10.7
500	6.5	8.4	9.0	9.1	9.1	9.4	9.6	9.7	9.7	9.7	9.7
1000	5.4	7.1	7.8	7.8	7.8	8.2	8.6	8.7	8.7	8.7	8.7
2000	4.2	5.4	6.1	6.2	6.2	6.9	7.1	7.4	7.4	7.6	7.7
5000	2.7	4.0	4.3	4.4	4.9	5.6	5.7	6.0	6.2	6.5	6.6
10,000	2.1	3.3	3.5	3.6	4.3	5.0	5.1	5.4	5.5	5.8	5.9
20,000	1.6	2.7	2.9	3.0	3.7	4.4	4.5	4.8	4.8	5.2	5.3
50,000	1.1	2.0	2.2	2.3	2.9	3.5	3.7	3.9	4.0	4.3	4.4
100,000	0.8	1.5	1.7	1.8	2.2	2.8	3.1	3.3	3.4	3.7	3.8
144,000	0.7	1.3	1.5	1.6	1.9	2.4	2.7	2.9	3.1	3.4	3.5

STORM STUDIES - ISOHYETAL MAPStorm of 2-6 June 1921Assignment SW I-23Study Prepared by: Albuquerque, N.Mex., District
Southwestern DivisionStorm Period 114 hours
from 12 M 1 June
to 6 PM 6 JuneSCALE
1
19,000,000
Polyconic Projection**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET



Storm of 16-19 November 1921
 Assignment SW 1-24
 Location N.E. Tex., to So. Ind.
 Study Prepared by:
 Southwestern Division
 Little Rock District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9-26-40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10-26-45
 Remarks: Center at Searcy,
 Arkansas

DATA AND COMPUTATIONS COMPILED

PART I

Preliminary Isohyetal map, in 1 sheet, scale 1:2,500,000
 Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	<u>25</u>
Form 5001-B (24-hour " ")-----	<u>--</u>
Form 5001-D (" " " ")-----	<u>18</u>
Misc. precip. records, meteorological data, etc.-----	<u>4</u>
Form 5002 (Mass rainfall curves)-----	<u>51</u>

PART II

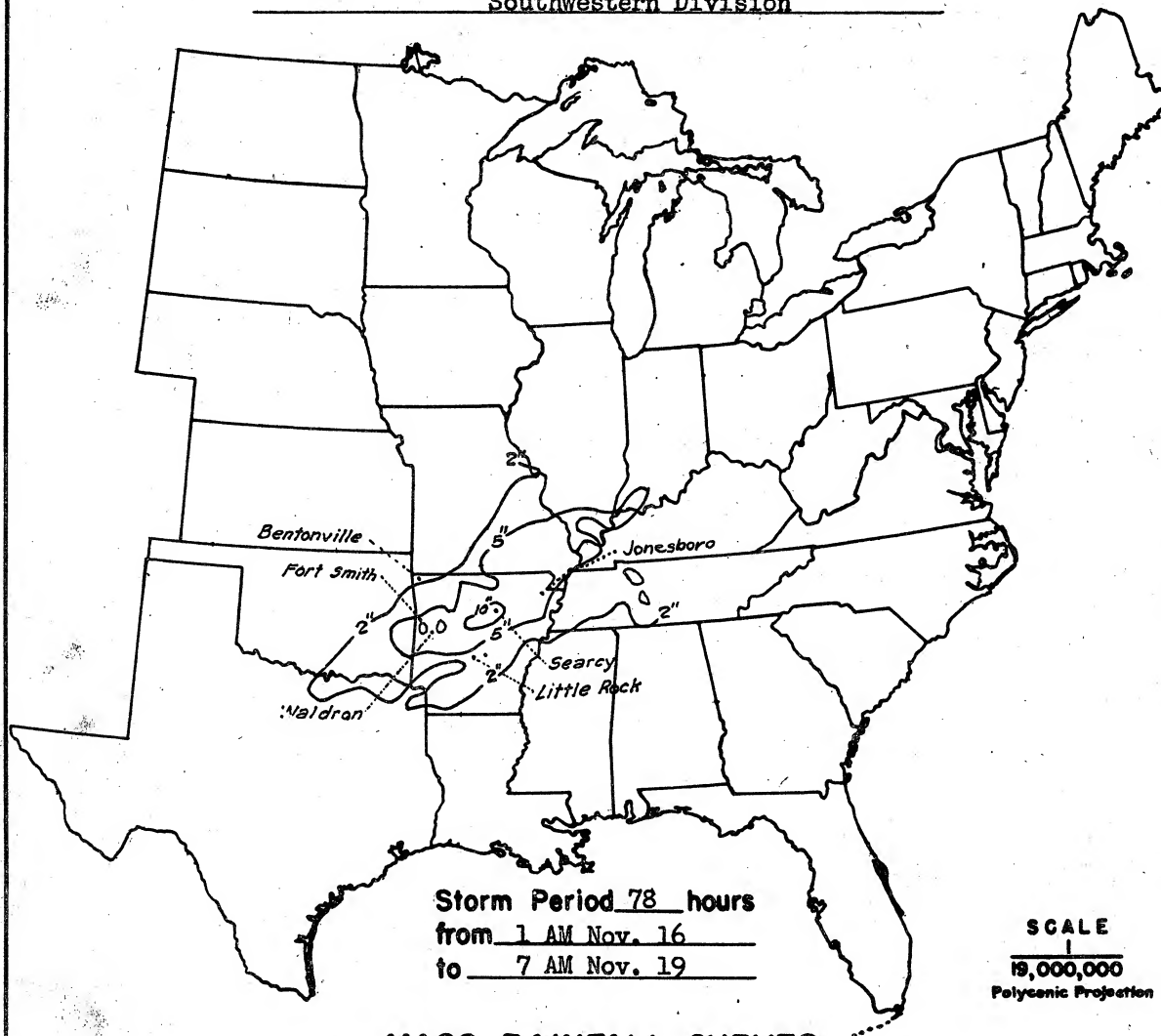
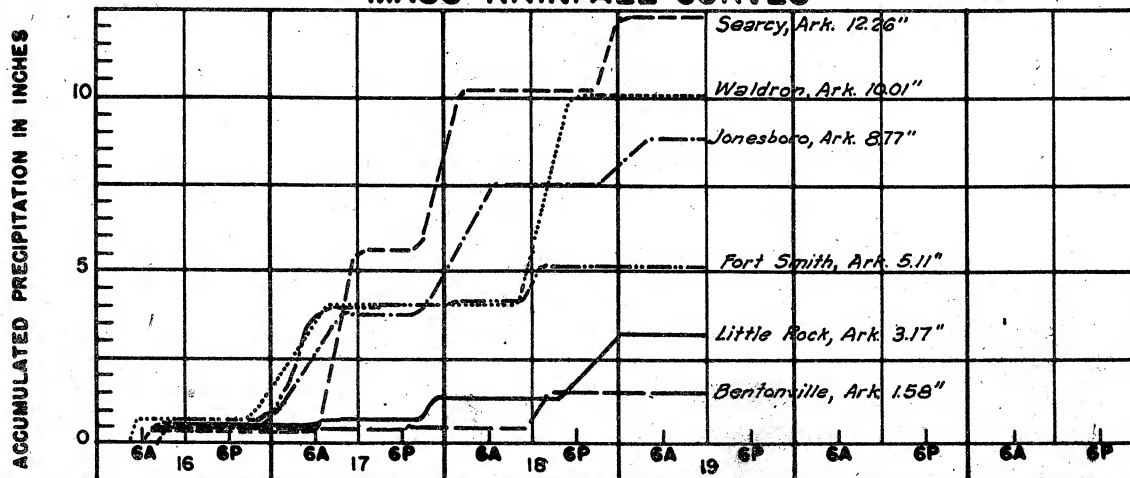
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

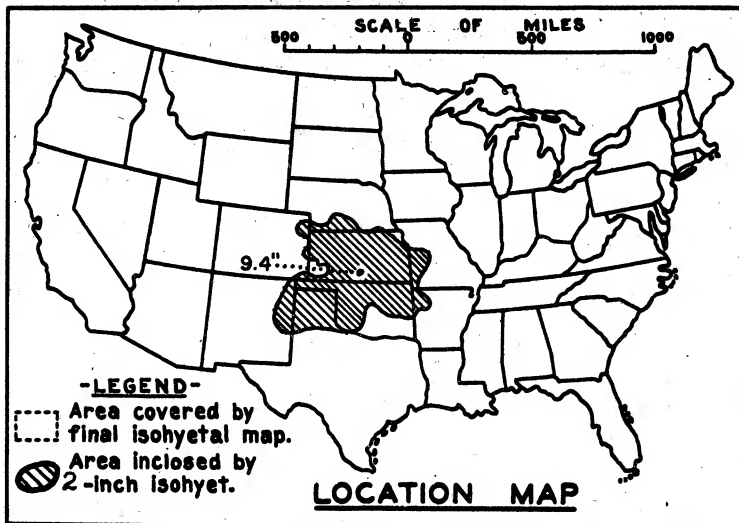
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	<u>6</u>
Form S-11 (Depth-area data from isohyetal map)-----	<u>2</u>
Form S-12 (Maximum depth-duration data)-----	<u>20</u>
Maximum duration-depth-area curves-----	<u>1</u>
Data relating to periods of maximum rainfall-----	<u>4</u>

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	78
10	5.2	6.0	8.1	9.7	9.7	9.7	11.9	11.9	12.3	12.3
100	4.4	5.2	7.0	8.9	9.3	9.3	11.5	11.6	12.0	12.0
200	4.1	4.9	6.7	8.6	9.1	9.1	11.3	11.4	11.7	11.8
500	3.7	4.5	6.1	8.0	8.6	8.6	10.8	10.9	11.2	11.3
1,000	3.4	4.1	5.6	7.4	8.1	8.1	10.1	10.2	10.6	10.7
2,000	2.9	3.6	5.0	6.4	7.2	7.2	9.0	9.2	9.6	9.7
5,000	2.2	2.9	4.1	4.8	5.3	5.6	7.4	7.8	8.4	8.5
10,000	1.9	2.6	3.3	3.9	4.4	4.9	6.7	7.2	7.7	7.8
20,000	1.8	2.3	2.8	3.3	4.0	4.4	6.1	6.7	7.0	7.2
50,000	1.4	1.8	2.2	2.8	3.5	3.8	5.1	5.7	5.8	6.0
100,000	1.0	1.4	1.8	2.3	2.8	3.0	4.1	4.6	4.7	4.9
130,000	0.7	1.2	1.5	2.1	2.3	2.5	3.5	3.8	4.1	4.3

STORM STUDIES - ISOHYETAL MAPStorm of November 16 - 19, 1921Assignment SW 1-24Study Prepared by: Little Rock, Ark. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 5-11 June 1923

Assignment SW 1-25

Location Kans.-Okla.- Mo.

Study Prepared by:

Southwestern Division
Tulsa District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 4/2/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/27/46Remarks: Center at
Wichita, Kansas**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	16
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	15
Misc. precip. records, meteorological data, etc.-----	13
Form 5002 (Mass rainfall curves)-----	43

PART II

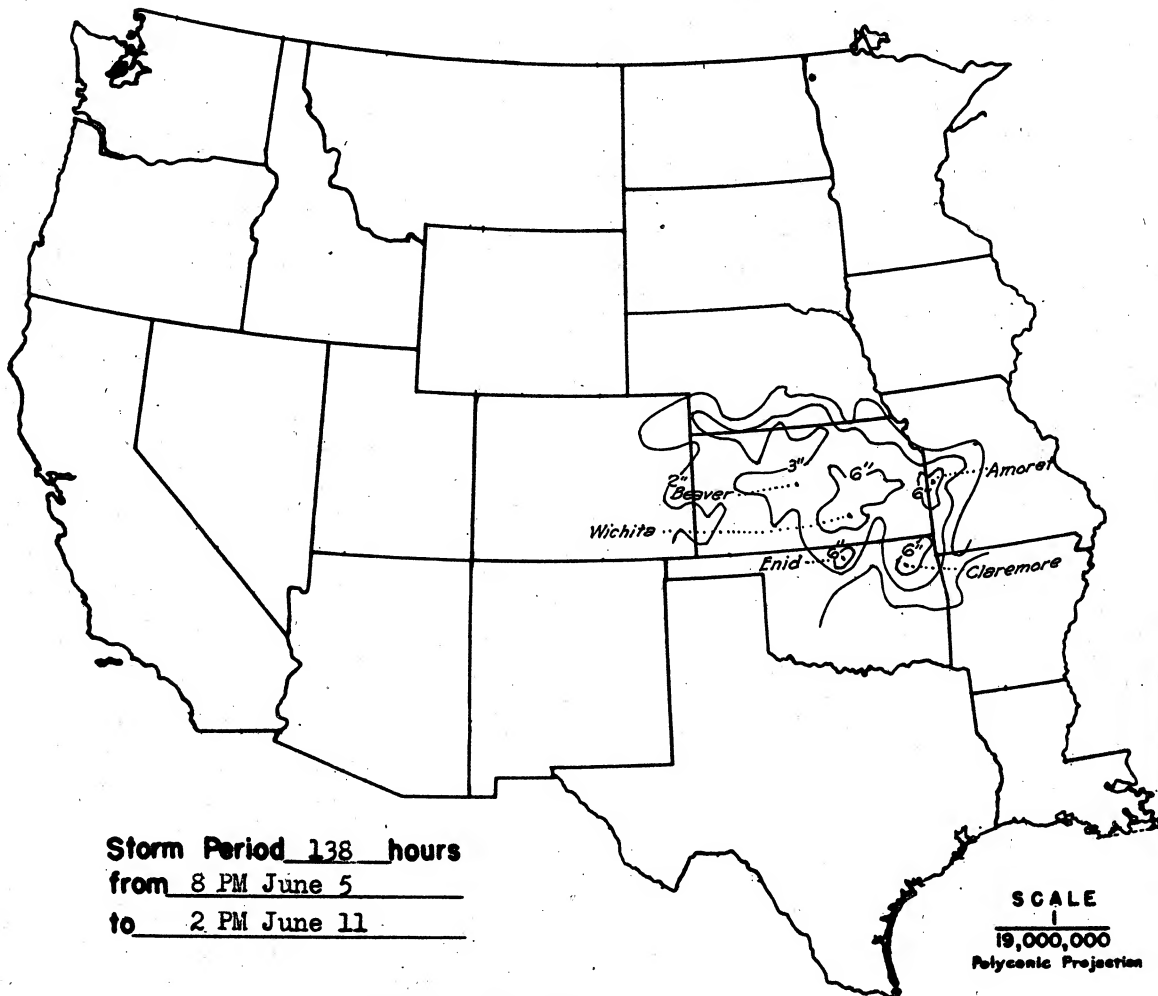
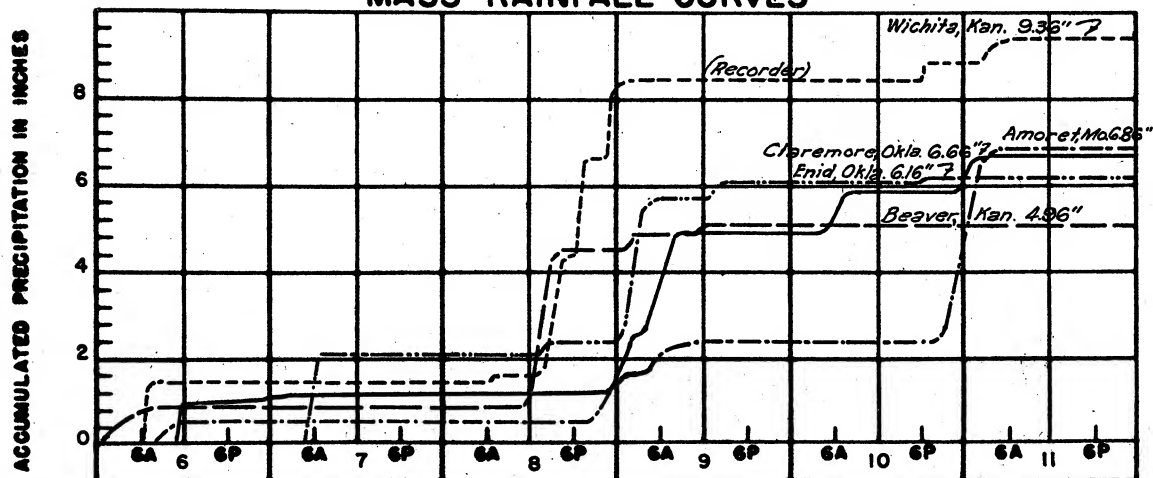
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

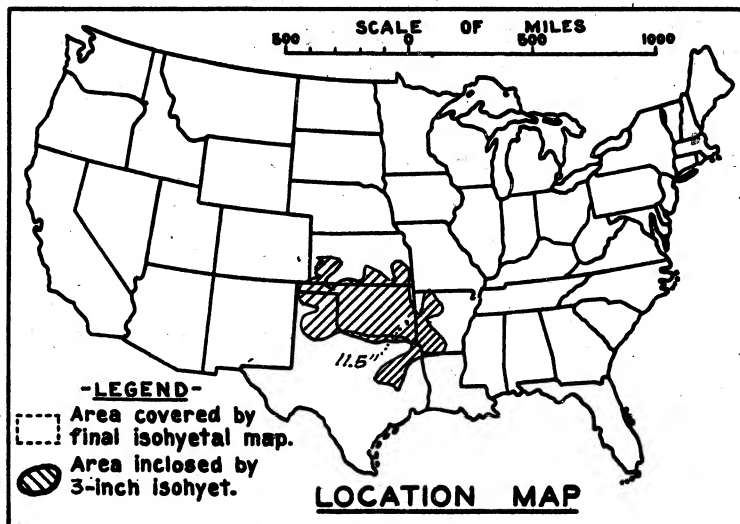
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours ^{72/} _{126/}										
	6	12	18	24	30	36	48	60	96	114	138
10	4.2	6.9	6.9	7.1	7.1	7.1	7.1	7.4	8.5	9.0	9.4
100	4.0	6.6	6.6	6.8	6.8	6.8	6.8	7.2	8.2	8.7	9.3
200	3.9	6.5	6.5	6.6	6.6	6.6	6.6	7.0	8.1	8.6	9.1
500	3.7	6.2	6.2	6.4	6.4	6.4	6.4	6.7	7.8	8.3	8.8
1,000	3.5	5.9	5.9	6.1	6.1	6.1	6.1	6.4	7.5	8.0	8.5
2,000	3.2	5.6	5.6	5.7	5.8	5.8	5.8	6.2	7.2	7.6	8.1
5,000	2.7	4.6	5.0	5.1	5.1	5.1	5.1	5.7	6.5	6.9	7.4
10,000	2.1	3.8	4.4	4.5	4.5	4.6	4.6	5.2	5.9	6.3	6.7
20,000	1.7	3.0	3.7	3.9	3.9	4.0	4.0	4.7	5.2	5.5	6.0
50,000	1.0	1.9	2.7	2.9	3.0	3.1	3.1	3.8	4.1	4.4	4.9
70,300	0.8	1.4	2.1	2.4	2.6	2.7	2.8	3.2	3.7	4.0	4.5

STORM STUDIES - ISOHYETAL MAPStorm of June 5-11, 1923Assignment SW 1-25Study Prepared by: Tulsa, Okla. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 13-20 September 1923

Assignment S W 1 - 26

Location Oklahoma

Study Prepared by:

Southwestern Division

Tulsa District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 6/21/40

Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 2/4/46

Remarks: Center at Smithville, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 22

Form 5001-B (24-hour " ")----- —

Form 5001-D (" " " ")----- 42

Misc. precip. records, meteorological data, etc.----- —

Form 5002 (Mass rainfall curves)----- 49

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 38

Form S-11 (Depth-area data from isohyetal map)----- 5

Form S-12 (Maximum depth-duration data)----- 28

Maximum duration-depth-area curves----- 1

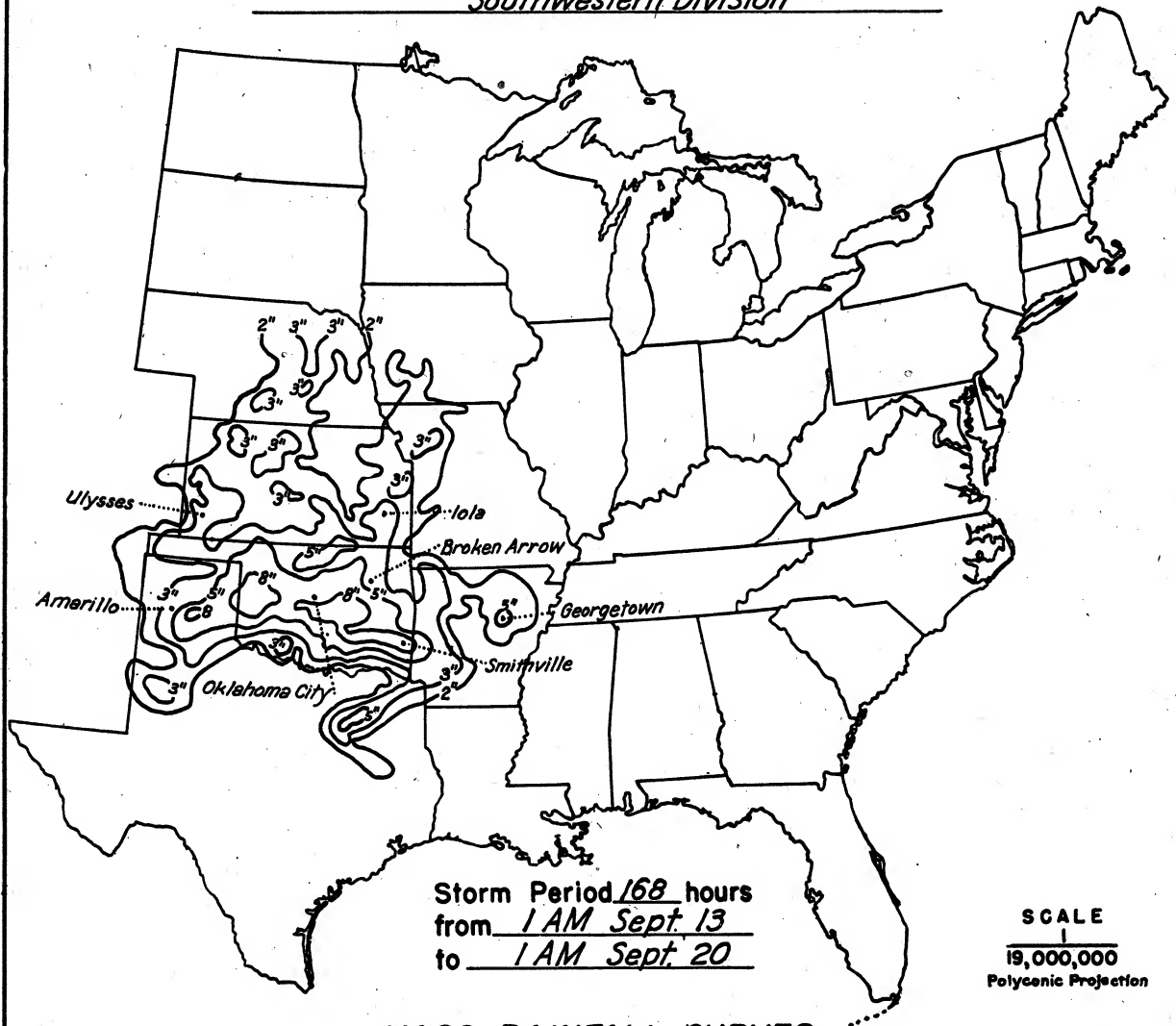
Data relating to periods of maximum rainfall----- 4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

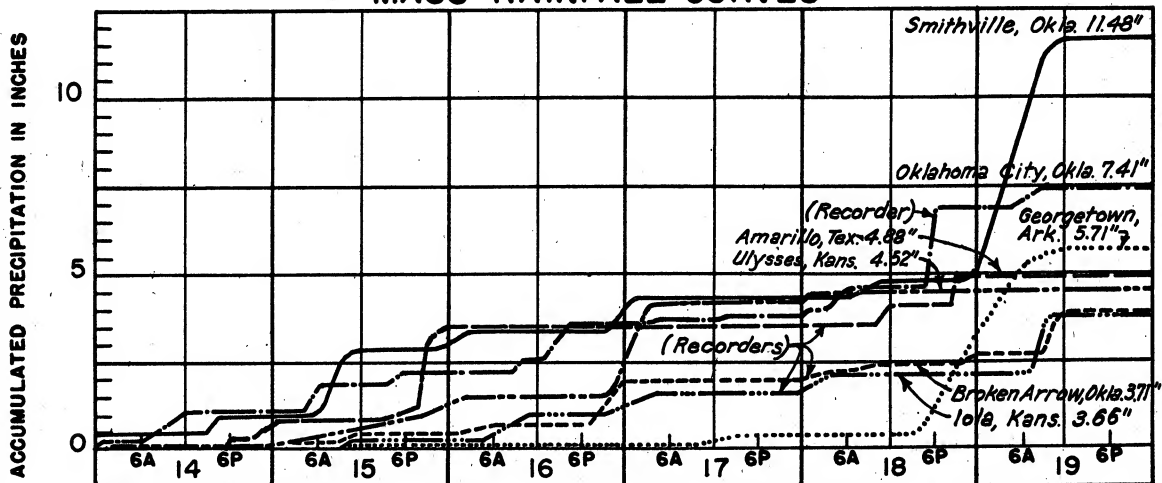
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	72	96	120	168
10	4.8	6.1	6.4	6.6	7.1	7.2	7.4	7.7	8.9	10.7	11.5
100	4.5	5.8	6.0	6.2	6.6	6.7	6.9	7.4	8.6	10.3	11.2
200	4.4	5.6	5.8	6.1	6.4	6.5	6.8	7.2	8.4	10.1	11.0
500	4.1	5.4	5.6	5.8	6.0	6.1	6.5	6.9	8.0	9.8	10.8
1,000	3.8	5.1	5.3	5.5	5.7	5.8	6.1	6.6	7.6	9.4	10.6
2,000	3.4	4.7	4.9	5.1	5.3	5.4	5.6	6.1	7.1	8.9	10.1
5,000	2.8	3.9	4.2	4.4	4.6	4.8	5.0	5.7	6.5	8.1	9.5
10,000	2.3	3.3	3.6	3.8	4.2	4.3	4.6	5.2	6.0	7.4	9.0
20,000	1.8	2.6	2.9	3.1	3.6	3.8	4.1	4.7	5.4	6.7	8.3
50,000	1.1	1.8	2.0	2.2	2.8	3.0	3.3	3.9	4.6	5.5	6.8
100,000	0.6	1.1	1.4	1.5	1.9	2.2	2.5	3.1	3.7	4.5	5.5

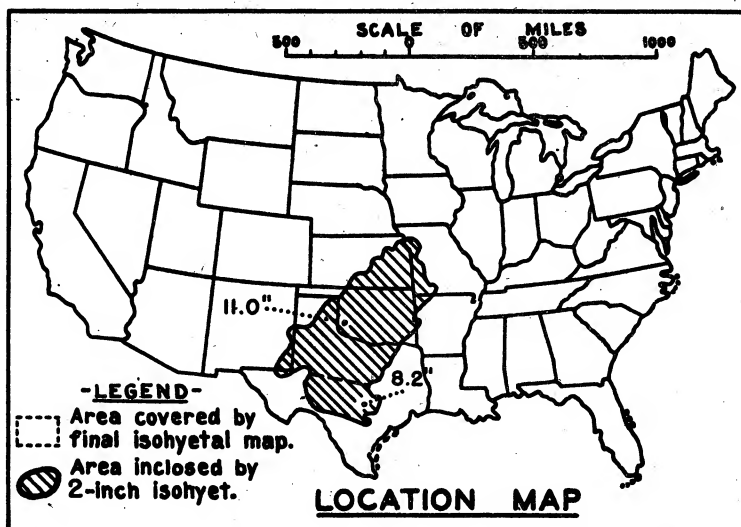
STORM STUDIES - ISOHYETAL MAP

Storm of September 13-20, 1923 Assignment SW 1-26
 Study Prepared by: Tulsa, Oklahoma District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 11-16 October 1923
 Assignment S W 1 - 27
 Location Okla., Tex., Kan., Mo
 Study Prepared by:
 Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/28/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/23/46

Remarks:

TOTAL STORM AREA
 Centers at: Mangum, Okla.
 and Austin, Texas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	24
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	31
Misc. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	49

PART II

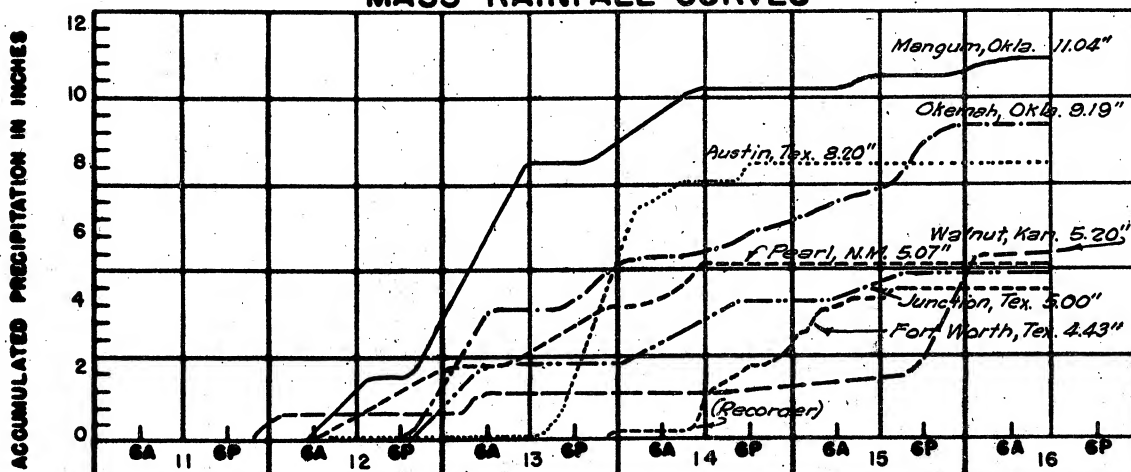
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

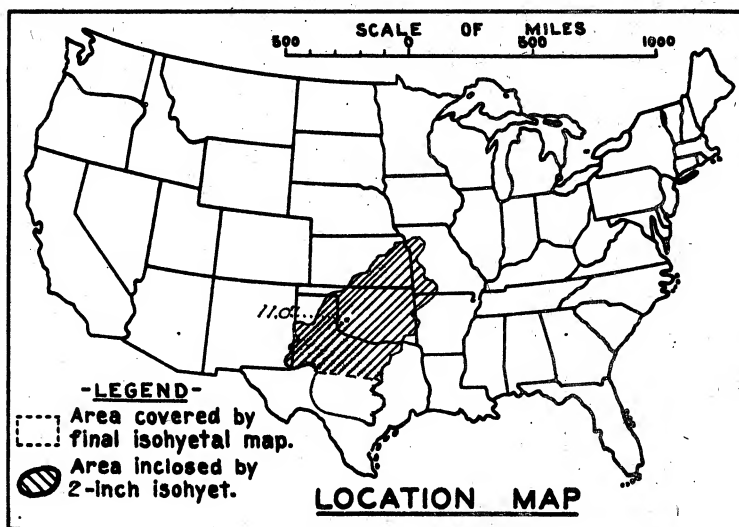
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	12
Form S-11 (Depth-area data from isohyetal map)-----	4
Form S-12 (Maximum depth-duration data)-----	17
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	3.5	6.0	7.3	7.4	7.9	8.2	9.6	10.2	10.2	10.9	11.0
100	3.0	5.6	6.7	6.9	7.6	7.9	9.3	9.8	9.8	10.5	10.6
200	2.8	5.4	6.3	6.6	7.4	7.7	9.2	9.6	9.6	10.3	10.4
500	2.6	4.9	5.7	6.0	7.1	7.3	8.7	9.1	9.1	9.9	10.1
1,000	2.4	4.4	5.1	5.6	6.7	6.9	8.2	8.6	8.7	9.5	9.7
2,000	2.3	3.7	4.4	5.2	6.3	6.4	7.5	8.0	8.2	9.1	9.3
5,000	2.0	3.0	3.8	4.6	5.6	5.7	6.5	7.0	7.5	8.4	8.6
10,000	1.8	2.6	3.3	4.0	4.8	5.0	5.7	6.3	6.8	7.8	8.0
20,000	1.5	2.2	2.8	3.4	4.0	4.2	4.9	5.6	6.2	7.1	7.3
50,000	1.1	1.6	2.1	2.5	3.0	3.2	3.9	4.5	5.1	5.9	6.1
100,000	0.7	1.2	1.6	1.9	2.2	2.4	3.0	3.6	4.1	4.9	5.2
150,000	0.6	1.0	1.3	1.5	1.7	2.0	2.5	2.9	3.5	4.2	4.5
200,000	0.4	0.8	1.1	1.2	1.4	1.7	2.1	2.5	3.0	3.6	4.0

STORM STUDIES - ISOHYETAL MAPStorm of October 11-16, 1923Assignment SW 1-27Study Prepared by: Tulsa, Okla. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 11-16 October 1923
 Assignment S W 1 - 27 (a)
 Location Okla., Tex., Kans., Mo.
 Study Prepared by:
 Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/28/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/23/46

Remarks:
 NORTHERN AREA ONLY
 Center at: Mangum, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 24
 Form 5001-B (24-hour " ")----- 0
 Form 5001-D (" " " ")----- 31
 Misc. precip. records, meteorological data, etc.----- 0
 Form 5002 (Mass rainfall curves)----- 49

PART II

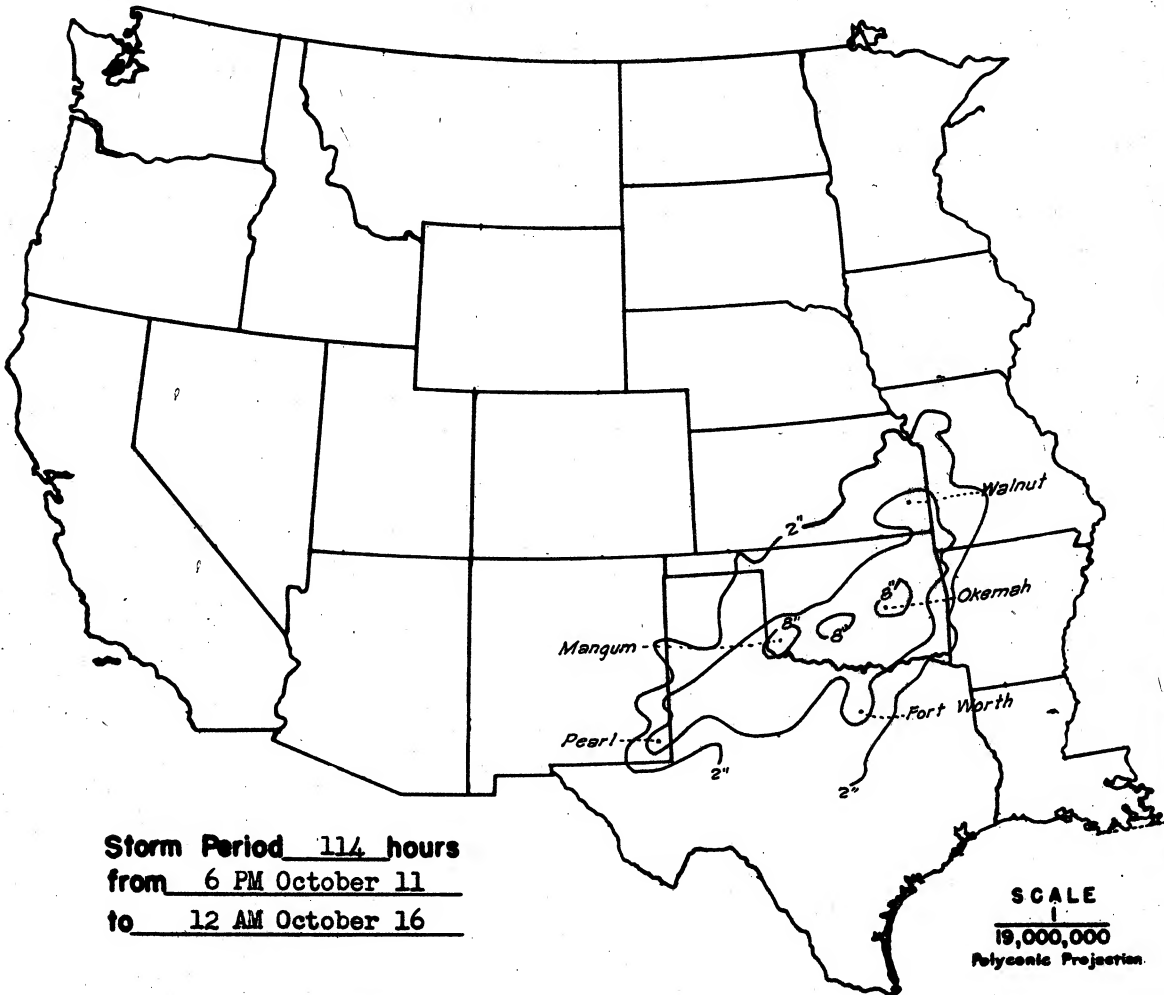
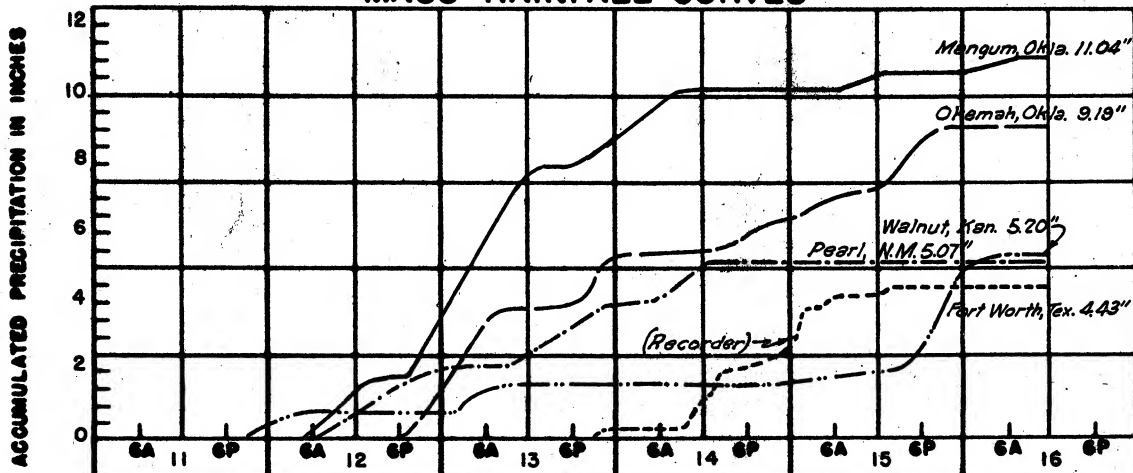
Final isohyetal maps, in 1 sheet, scale 1:1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 12
 Form S-11 (Depth-area data from isohyetal map)----- 4
 Form S-12 (Maximum depth-duration data)----- 15
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

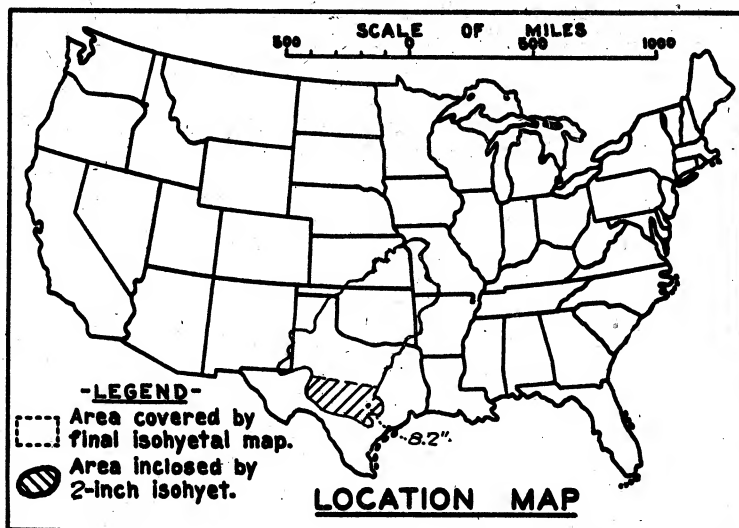
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	3.5	4.8	6.2	6.7	7.8	8.2	9.6	10.2	10.2	10.9	11.0
100	3.0	4.7	6.0	6.5	7.6	7.9	9.3	9.8	9.8	10.5	10.6
200	2.8	4.5	5.8	6.3	7.4	7.7	9.2	9.6	9.6	10.3	10.4
500	2.6	4.2	5.3	6.0	7.1	7.3	8.7	9.1	9.1	9.9	10.1
1,000	2.4	3.8	4.9	5.6	6.7	6.9	8.2	8.6	8.7	9.5	9.7
2,000	2.3	3.5	4.4	5.2	6.3	6.4	7.5	8.0	8.2	9.1	9.3
5,000	2.0	3.0	3.8	4.6	5.6	5.7	6.5	7.0	7.5	8.4	8.6
10,000	1.8	2.6	3.3	4.0	4.8	5.0	5.7	6.3	6.8	7.8	8.0
20,000	1.5	2.2	2.8	3.4	4.0	4.2	4.9	5.6	6.2	7.1	7.3
50,000	1.1	1.6	2.1	2.5	3.0	3.2	3.9	4.5	5.1	5.9	6.1
100,000	0.7	1.2	1.6	1.9	2.2	2.4	3.0	3.6	4.1	4.9	5.2
135,000	0.6	1.0	1.4	1.6	1.8	2.1	2.6	3.1	3.6	4.4	4.7

STORM STUDIES - ISOHYETAL MAP

Storm of October 11-16, 1923 Assignment SW 1-27(a)
Study Prepared by: Tulsa, Okla. District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 11-16 October 1923
 Assignment S W 1 - 27 (b)
 Location Okla., Tex., Kans., Mo.
 Study Prepared by:
 Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/28/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/23/46

Remarks:

SOUTHERN AREA ONLY
 Center at: Austin, Texas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 24
 Form 5001-B (24-hour " ")----- 0
 Form 5001-D (" " " ")----- 31
 Misc. precip. records, meteorological data, etc.----- 0
 Form 5002 (Mass rainfall curves)----- 49

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

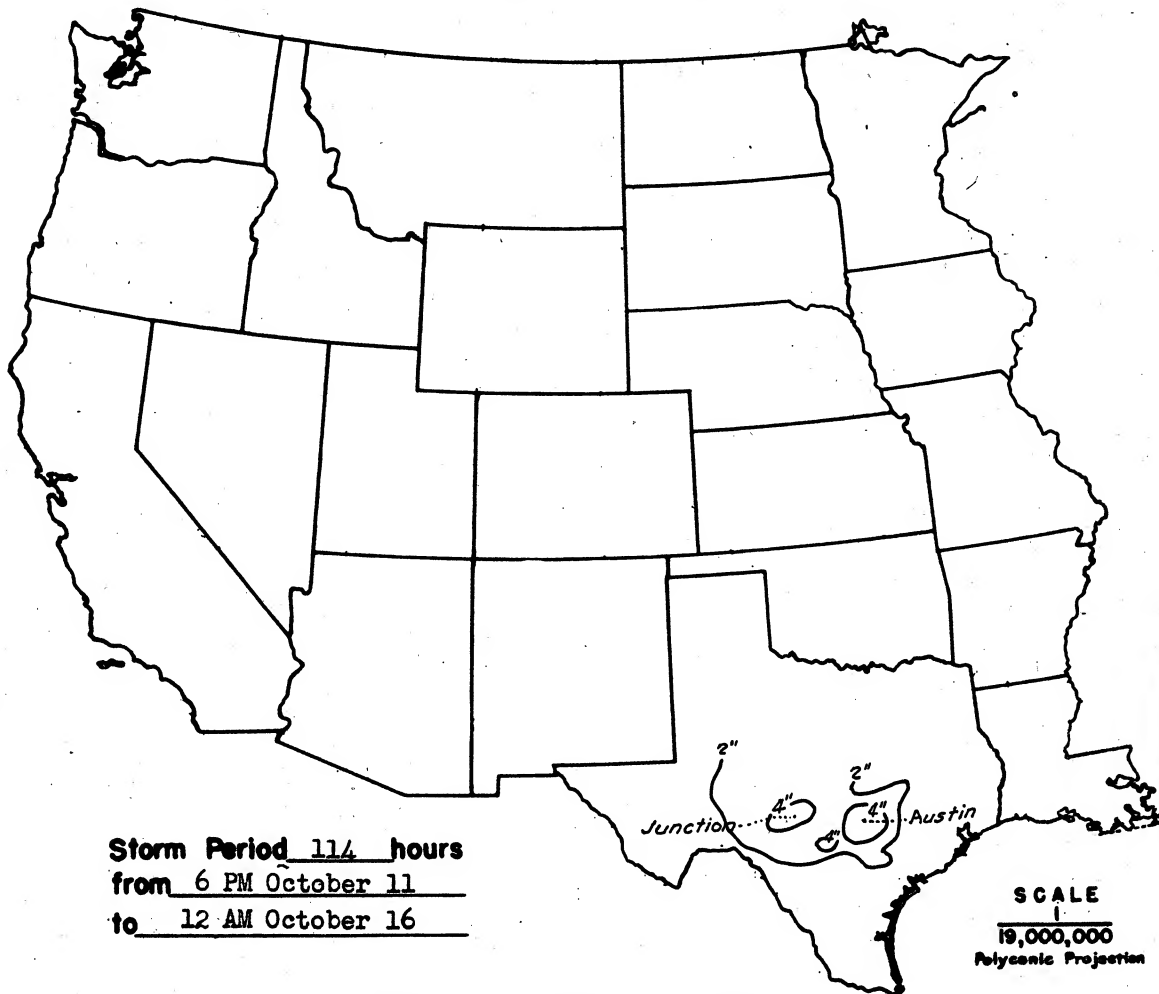
Form S-10 (Data from mass rainfall curves)----- 12
 Form S-11 (Depth-area data from isohyetal map)----- 4
 Form S-12 (Maximum depth-duration data)----- 2
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

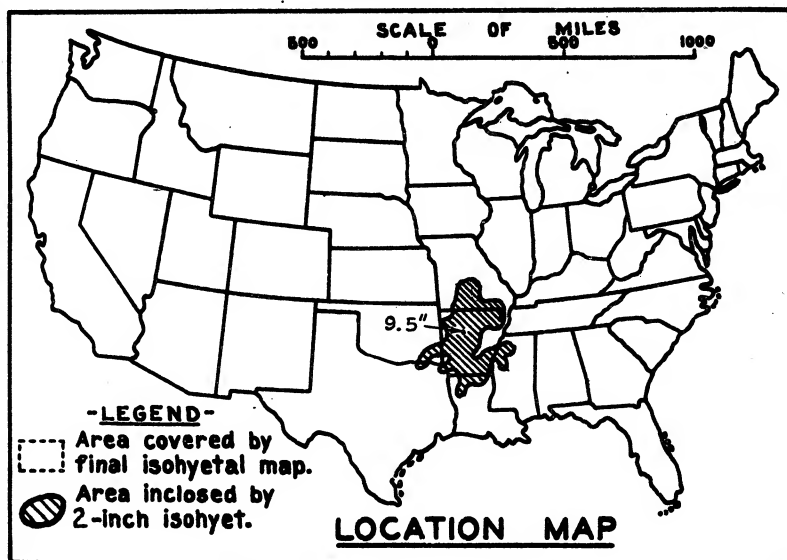
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	114
10	3.2	6.0	7.3	7.4	7.9	7.9	8.0	8.0	8.1	8.2	8.2
100	2.9	5.6	6.7	6.9	7.3	7.3	7.3	7.4	7.5	7.6	7.6
200	2.8	5.4	6.3	6.6	6.9	6.9	7.0	7.0	7.1	7.2	7.2
500	2.6	4.9	5.7	6.0	6.4	6.4	6.4	6.5	6.6	6.7	6.7
1,000	2.3	4.4	5.1	5.4	5.8	5.8	5.8	5.9	6.0	6.1	6.1
2,000	2.0	3.7	4.3	4.5	5.0	5.0	5.1	5.2	5.3	5.3	5.3
2,900	1.7	3.1	3.6	3.7	4.2	4.4	4.5	4.6	4.7	4.7	4.7

STORM STUDIES - ISOHYETAL MAP

Storm of October 11-16, 1923 Assignment SW 1-27(b)
Study Prepared by: Tulsa, Okla. District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 23-26, 1925
 Assignment S W 1 - 29
 Location Ark. Mo. Tex. Okla. La.
 Study Prepared by: Miss.

Southwestern Division

Little Rock District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/20/40

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/1/45

Remarks: Centers at;
 Freeman Springs, and
 Mount Ida, Arkansas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data) ----- 12
 Form 5001-B (24-hour " ") ----- -
 Form 5001-D (" " " ") ----- 8
 Misc. precip. records, meteorological data, etc. ----- 2
 Form 5002 (Mass rainfall curves) ----- 17

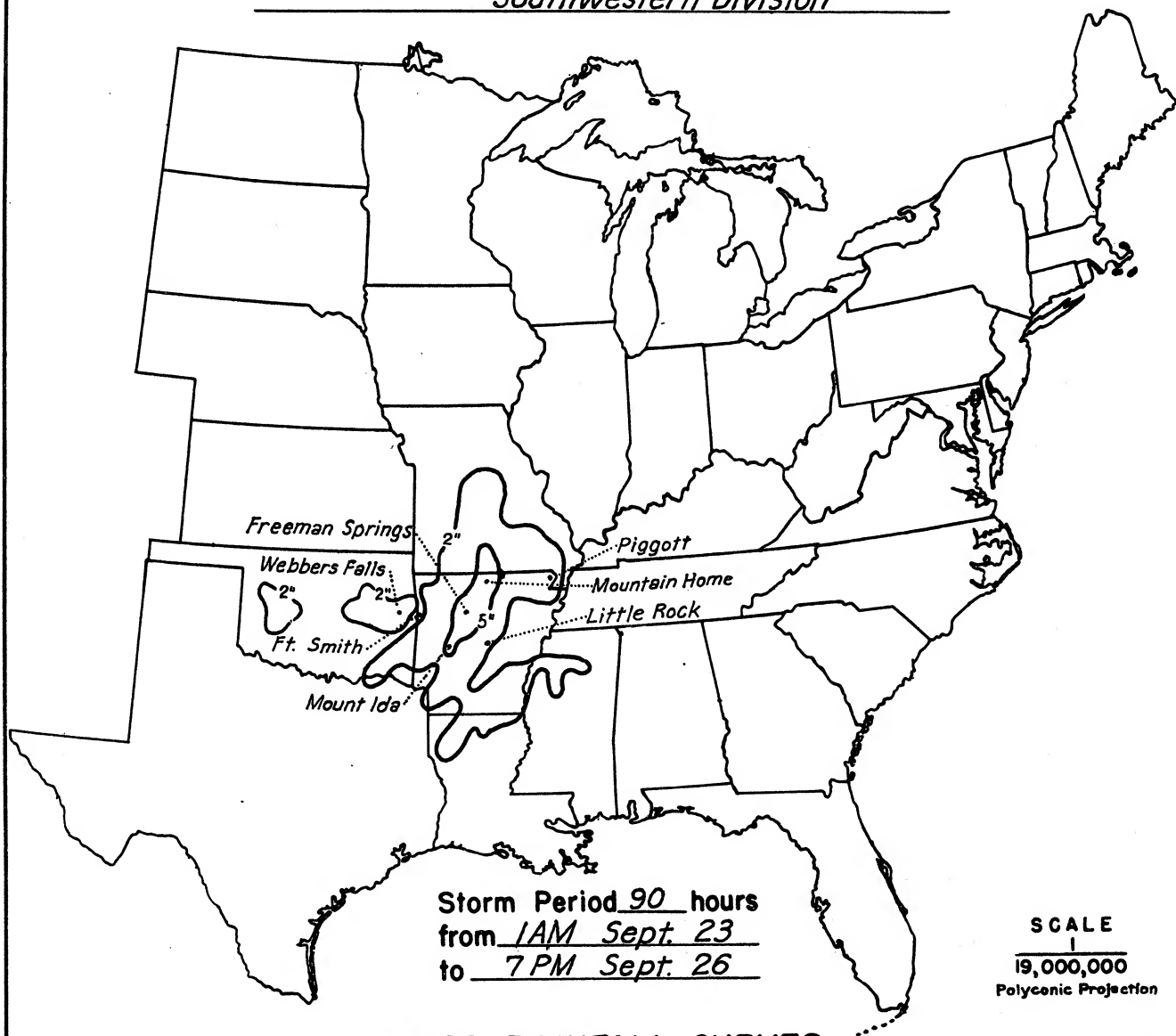
PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves) ----- 8
 Form S-11 (Depth-area data from isohyetal map) ----- 2
 Form S-12 (Maximum depth-duration data) ----- 15
 Maximum duration-depth-area curves ----- 1
 Data relating to periods of maximum rainfall ----- 4

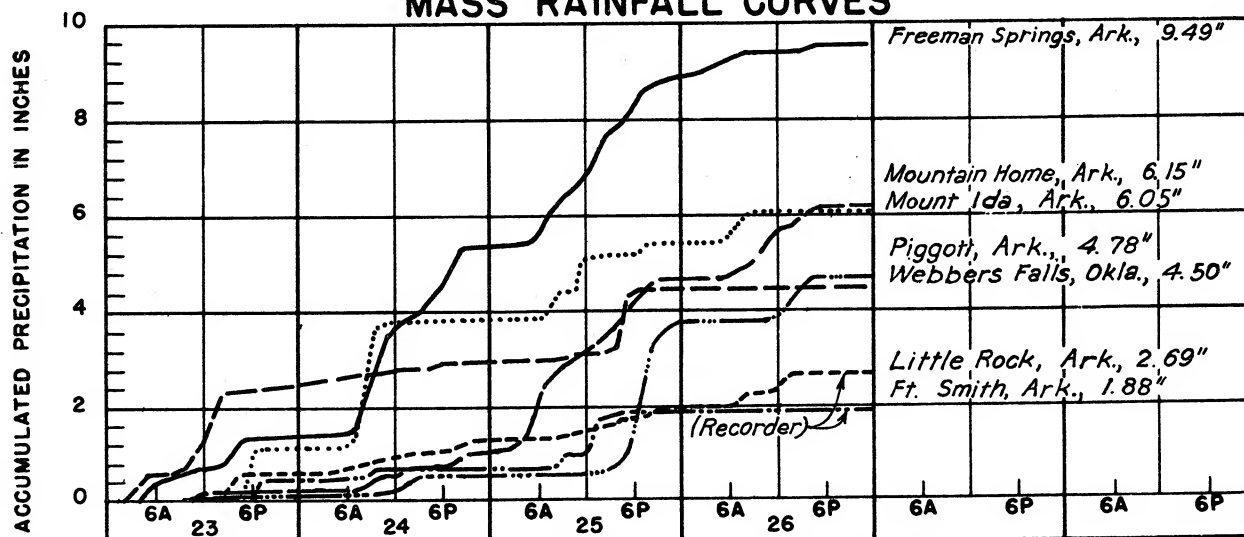
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

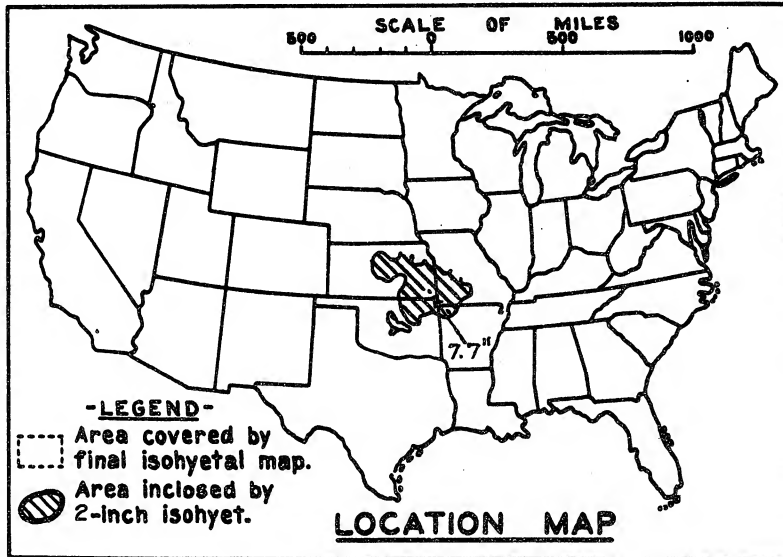
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	90
10	3.0	3.5	4.0	4.5	5.5	6.9	7.7	8.1	9.0	9.5
100	2.8	3.4	3.9	4.4	5.4	6.7	7.6	7.9	8.8	9.4
200	2.6	3.3	3.9	4.3	5.3	6.5	7.4	7.8	8.6	9.2
500	2.4	3.2	3.7	4.1	5.2	6.3	7.1	7.6	8.3	8.9
1,000	2.2	3.0	3.5	3.9	5.0	6.0	6.8	7.3	7.9	8.6
2,000	2.0	2.7	3.3	3.6	4.6	5.7	6.4	6.9	7.4	8.1
5,000	1.7	2.3	2.9	3.2	4.0	4.9	5.6	6.1	6.5	7.2
10,000	1.4	2.0	2.5	2.8	3.4	4.3	4.8	5.3	5.7	6.4
20,000	1.1	1.5	2.0	2.3	2.8	3.5	4.0	4.4	4.8	4.9
25,000	1.0	1.4	1.9	2.2	2.6	3.2	3.7	4.1	4.5	4.9
50,000	0.7	1.0	1.4	1.7	1.9	2.3	2.8	3.2	3.5	4.0
75,000	0.5	0.7	1.1	1.3	1.5	1.8	2.3	2.6	2.9	3.3

STORM STUDIES - ISOHYETAL MAP

Storm of September 23-26, 1925 Assignment SW 1-29Study Prepared by: Little Rock, Ark. District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 2-5, 1926
 Assignment S W 1 - 30
 Location Okla., Kans., & Mo.
 Study Prepared by:

Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 1/14/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/26/45

Remarks: Centers at;
 Columbus, Kans. and
 Pensacola, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)----- 18
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 17
 Misc. precip. records, meteorological data, etc.----- -
 Form 5002 (Mass rainfall curves)----- 40

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 15
 Form S-11 (Depth-area data from isohyetal map)----- 3
 Form S-12 (Maximum depth-duration data)----- 12
 Maximum duration-depth-area curves----- 2
 Data relating to periods of maximum rainfall----- 2

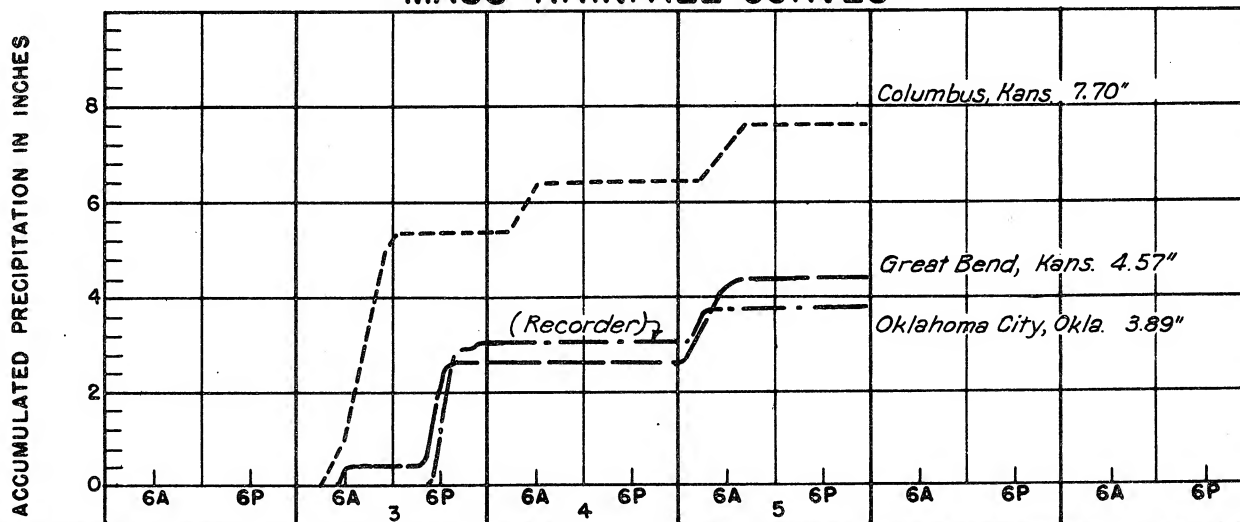
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

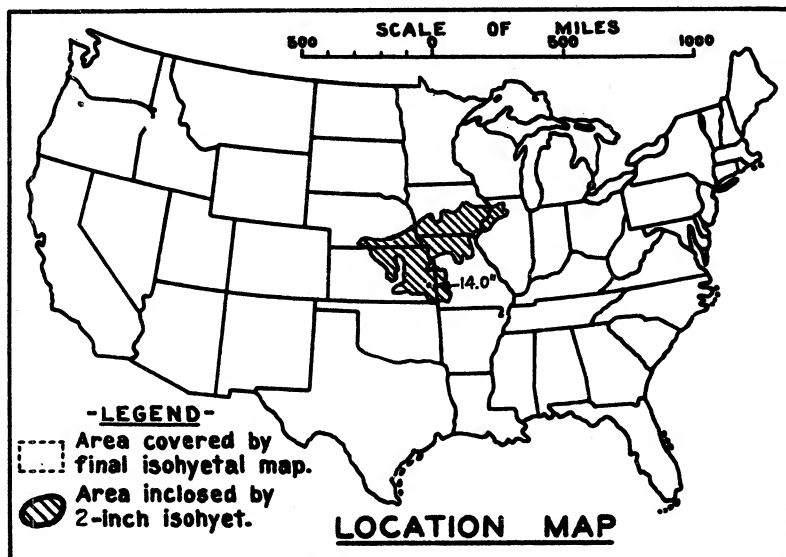
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	78	
10	4.6	5.8	6.9	7.1	7.4	7.7	7.7	7.7	7.7	
100	4.0	5.5	6.5	6.9	7.3	7.4	7.5	7.5	7.5	
200	3.8	5.3	6.3	6.7	7.1	7.2	7.4	7.4	7.4	
500	3.5	4.7	5.9	6.3	6.8	7.0	7.2	7.2	7.2	
1,000	3.2	4.2	5.4	5.9	6.6	6.7	7.0	7.0	7.0	
2,000	2.9	3.7	4.8	5.5	6.2	6.4	6.7	6.7	6.7	
5,000	2.4	3.1	4.0	5.0	5.7	5.8	6.2	6.3	6.3	
10,000	2.0	2.6	3.4	4.6	5.0	5.3	5.7	5.8	5.8	
20,000	1.6	2.1	2.7	3.8	4.3	4.5	4.9	5.1	5.1	
50,000	1.0	1.4	1.7	2.3	2.9	3.1	3.5	3.7	3.7	

STORM STUDIES - ISOHYETAL MAP

Storm of September 2-5, 1926 Assignment SW 1-30Study Prepared by: Tulsa, Okla. District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 11-16, 1926
 Assignment S W 2 - 1
 Location Kans. Nebr. Iowa Mo.
 Study Prepared by:

Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 1/31/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 6/5/45

Remarks: Center
 near Neosho Falls, Kans.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	8
Form 5001-B (24-hour " " " ").....	-
Form 5001-D (" " " " " ").....	6
Miscl. precip. records, meteorological data, etc.....	2
Form 5002 (Mass rainfall curves).....	17

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

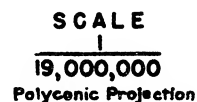
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	10
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	6
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	144
Max. Station	13.6	13.8	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
10	13.4	13.7	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
100	12.2	12.5	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
200	11.4	11.7	11.9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
500	9.5	10.0	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.4	10.4
1,000	7.9	8.5	8.8	8.8	8.8	8.8	8.8	8.8	8.8	9.0	9.0
2,000	6.4	7.1	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.6	7.6
5,000	4.3	5.1	5.3	5.3	5.3	5.3	5.3	5.5	5.5	5.8	5.8
10,000	2.9	3.8	3.9	4.0	4.0	4.0	4.2	4.3	4.4	5.0	5.0
20,000	1.7	2.6	2.7	2.8	2.8	2.8	2.9	3.3	3.5	4.4	4.5
30,000	1.2	2.0	2.1	2.2	2.2	2.2	2.3	2.8	3.0	4.1	4.2

Storm of September 11-16 1926 Assignment SW 2-1
Study Prepared by: Tulsa, Okla. District
Southwestern Divisions



ACCUMULATED PRECIPITATION IN INCHES

16
12
8
4
0

6A 11 6P 6A 12 6P 6A 13 6P 6A 14 6P 6A 15 6P 6A 16 6P

Neosho Falls, Kans., (Nr.) 14.0"

Albany, Mo., 8.75"

Junction City, Kans., 8.07"

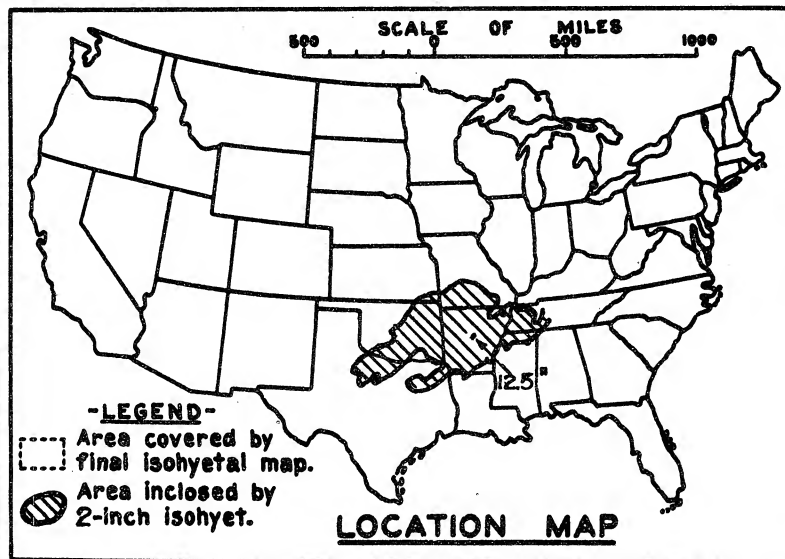
(Recorder)

Iola, Kans., 7.31"

Washington, Iowa, 4.35"

(Recorder)

Topeka, Kans., 2.85"

STORM STUDIES - PERTINENT DATA SHEET

Storm of April 17-21, 1927
 Assignment S W 2 - 4
 Location Ark., Tex., Okla., Mo., Tenn., & Miss.
 Study Prepared by:

Southwestern Division
 Little Rock District Office
 Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2-24-44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 8-28-45

Remarks: Centers at

Jessieville, Ark.
 Story, Ark.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	14
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	13
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	33

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

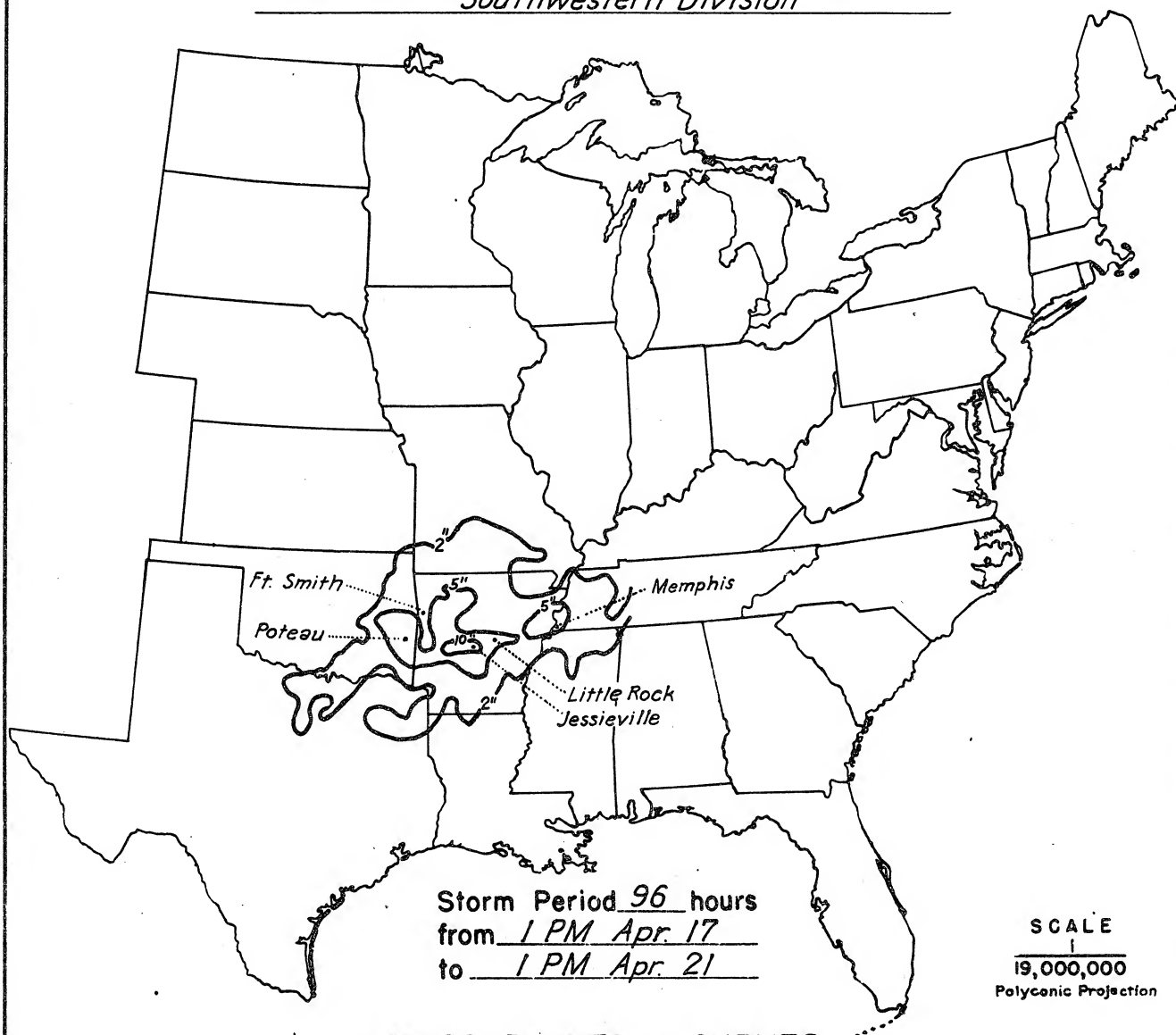
Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	18
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

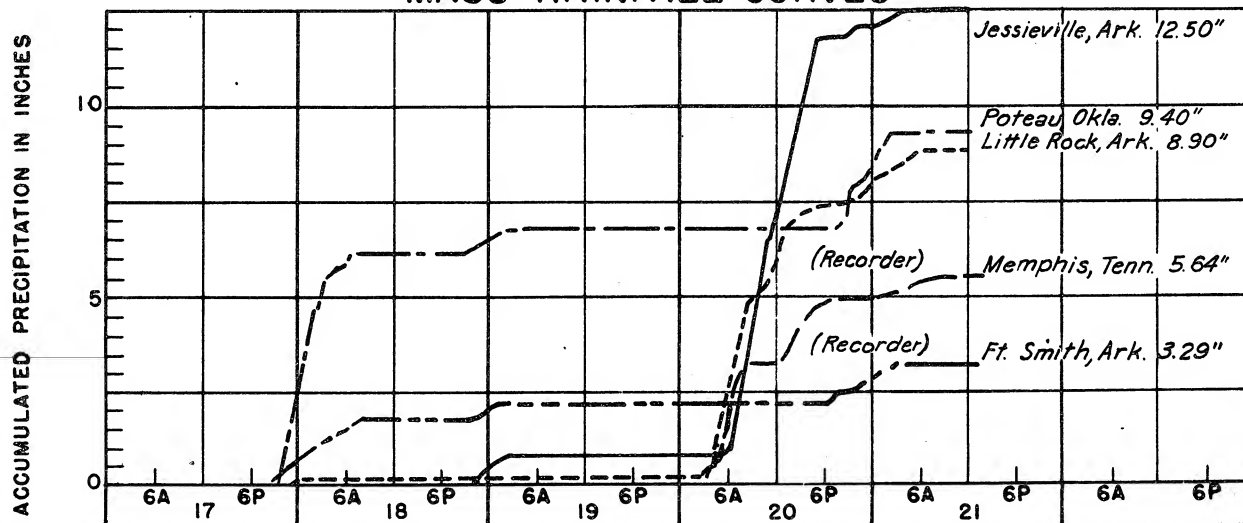
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	
10	7.0	10.9	11.3	11.8	11.8	11.8	12.0	12.5	12.5	12.5	
100	6.3	9.6	10.7	11.5	11.7	11.7	11.8	12.3	12.3	12.4	
200	6.0	9.2	10.4	11.2	11.6	11.6	11.6	12.1	12.1	12.2	
500	5.4	8.4	9.7	10.6	11.0	11.0	11.0	11.5	11.5	11.6	
1,000	4.8	7.5	8.9	10.0	10.3	10.3	10.3	10.8	10.8	10.9	
2,000	4.0	6.2	7.9	9.0	9.4	9.4	9.4	9.8	9.8	10.0	
5,000	2.9	4.7	6.3	7.2	7.7	7.7	7.7	8.1	8.1	8.7	
10,000	2.2	3.7	5.2	5.7	6.3	6.4	6.4	6.6	6.6	7.6	
20,000	1.6	2.8	4.1	4.6	5.0	5.1	5.1	5.2	5.4	6.5	
50,000	1.1	1.7	2.6	3.1	3.3	3.4	3.4	3.6	3.9	5.0	
100,000	0.7	1.2	1.7	2.0	2.1	2.2	2.2	2.6	2.8	3.7	

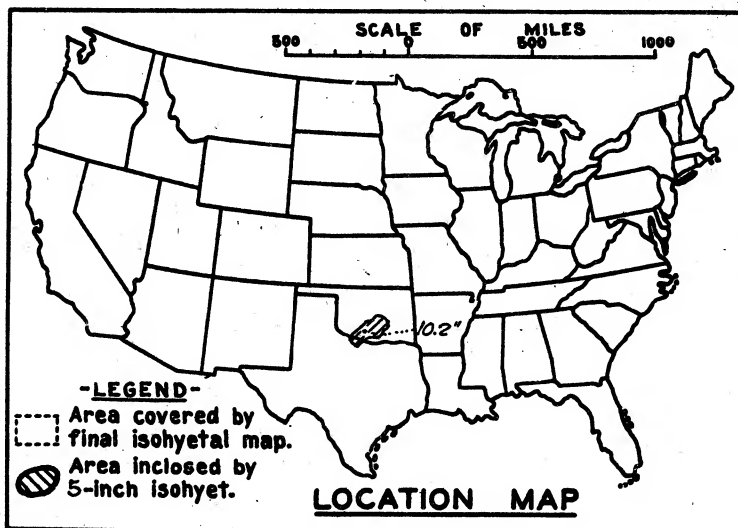
STORM STUDIES - ISOHYETAL MAP

Storm of April 17-21, 1927 Assignment SW 2-4
Study Prepared by: Little Rock, Ark. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 12-15 July 1927

Assignment S W 2 - 5

Location Tex., and Okla.

Study Prepared by:

Southwestern Division

Denison District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 11-7-40Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11-9-45

Remarks: Center at:

Ardmore, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	3
Form 5001-B (24-hour " ")-----	1
Form 5001-D (" " " ")-----	4
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	12

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

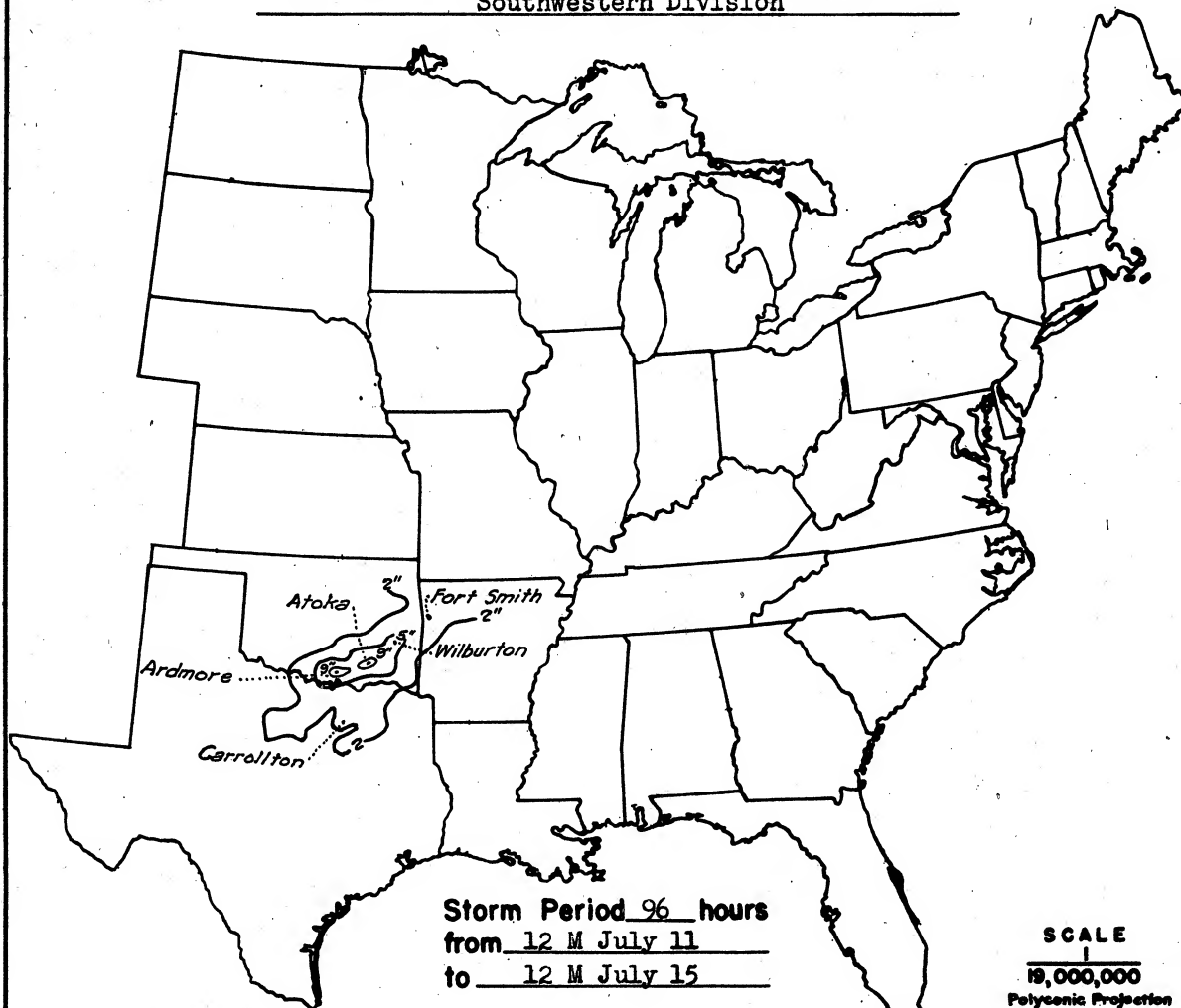
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

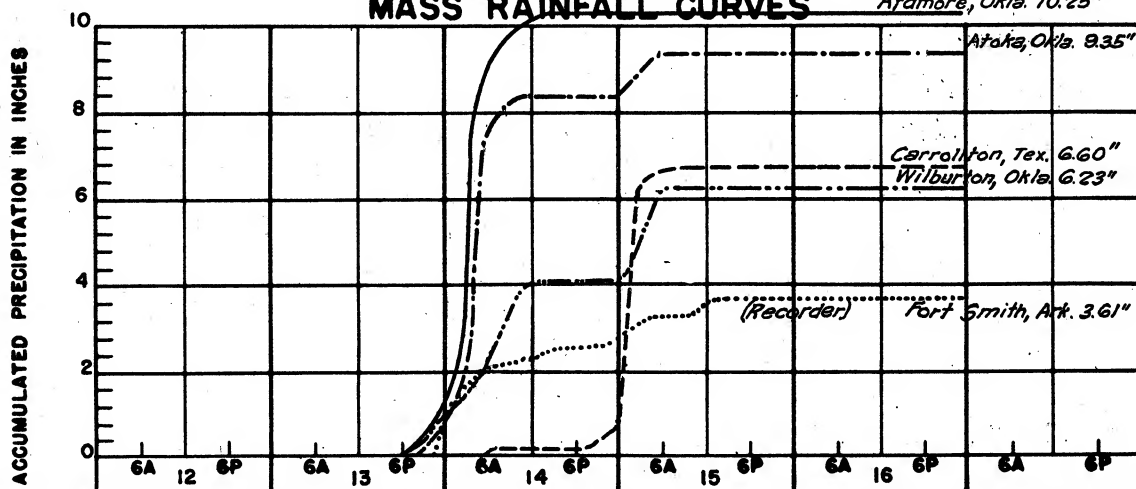
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

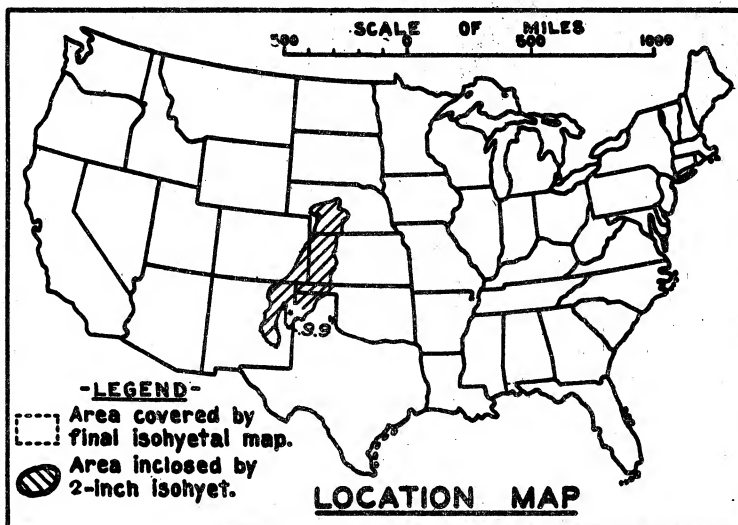
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	96			
Max. Station	7.0	9.0	10.0	10.2	10.2	10.2	10.2	10.2			
10	6.9	8.7	10.0	10.2	10.2	10.2	10.2	10.2			
100	6.7	8.3	9.7	9.9	9.9	9.9	9.9	9.9			
200	6.6	8.1	9.5	9.7	9.7	9.7	9.7	9.7			
500	6.5	7.9	9.1	9.2	9.2	9.3	9.3	9.3			
1,000	6.2	7.5	8.5	8.6	8.6	8.8	8.8	8.8			
2,000	5.7	6.9	7.8	7.9	7.9	8.2	8.4	8.4			
5,000	4.7	5.6	6.4	6.6	6.6	7.0	7.4	7.4			
10,000	3.6	4.4	5.0	5.1	5.5	6.0	6.4	6.4			
20,000	2.2	2.9	3.3	3.5	4.2	4.7	5.1	5.1			
33,000	1.4	2.0	2.3	2.6	3.3	3.6	4.2	4.2			

STORM STUDIES - ISOHYETAL MAP

Storm of July 12-15, 1927 Assignment SW 2-5Study Prepared by: Denison, Texas District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 9-12 October 1930
 Assignment S W 2 - 6
 Location N.M., Colo., Kans., Nebr.,
 Study Prepared by: Tex., & Okla.

Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/6/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/26/45

Remarks: Center at:

Porter, New Mexico

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	2
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	12

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

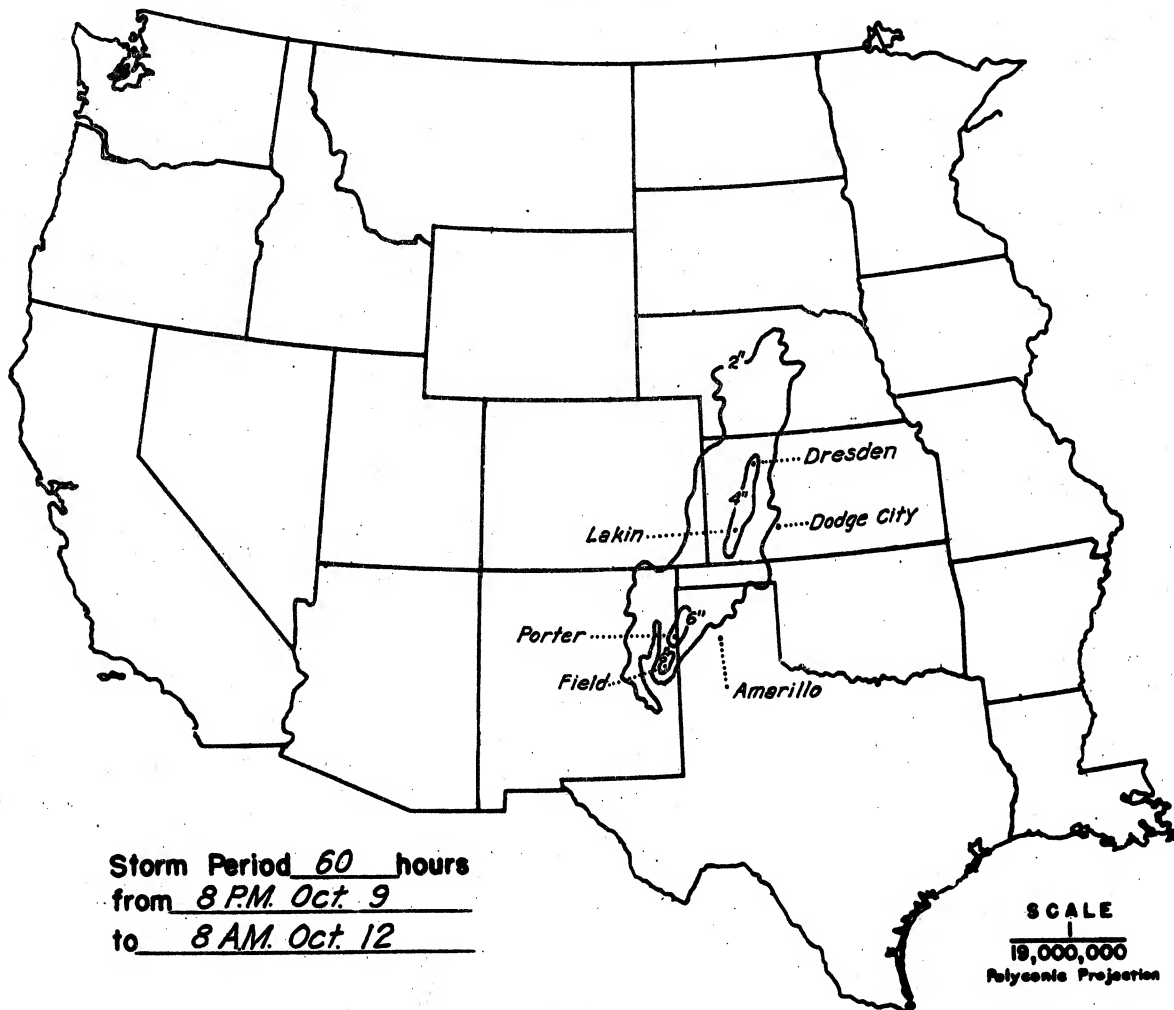
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

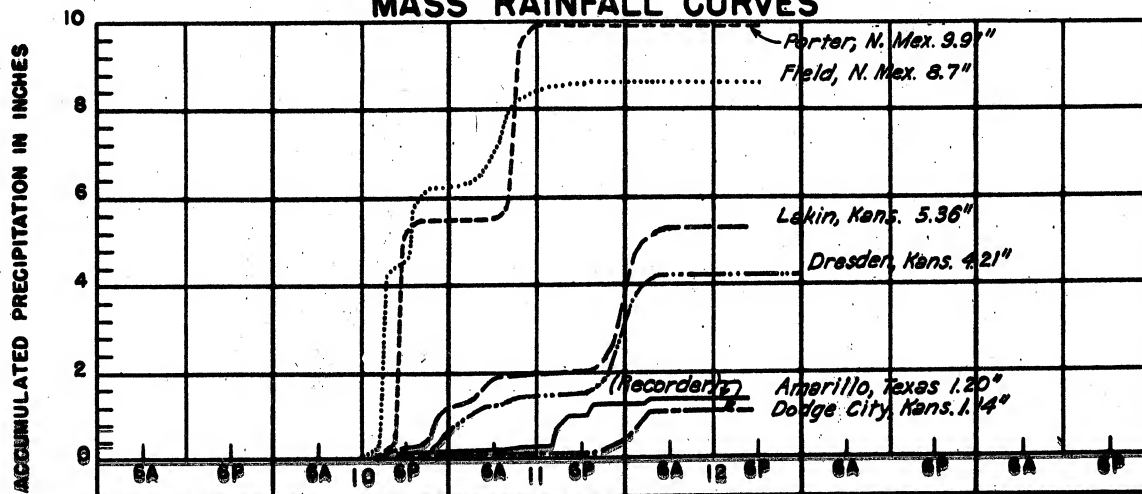
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6.	12.	18.	24.	30.	36.	48.	60.			
10	5.7	6.3	8.5	9.9	9.9	9.9	9.9	9.9			
100	5.3	5.9	7.6	9.1	9.1	9.1	9.1	9.1			
200	5.1	5.7	7.2	8.7	8.7	8.7	8.7	8.7			
500	4.6	5.3	6.5	7.9	8.0	8.0	8.0	8.0			
1,000	4.1	4.9	6.0	7.2	7.3	7.4	7.4	7.4			
2,000	3.6	4.4	5.4	6.5	6.6	6.7	6.8	6.8			
5,000	2.9	3.7	4.6	5.4	5.5	5.8	5.9	5.9			
10,000	2.3	3.2	3.9	4.5	4.7	5.1	5.2	5.2			
20,000	1.7	2.5	3.2	3.6	3.9	4.3	4.4	4.4			
27,700	1.1	2.1	2.8	3.1	3.5	4.0	4.1	4.1			

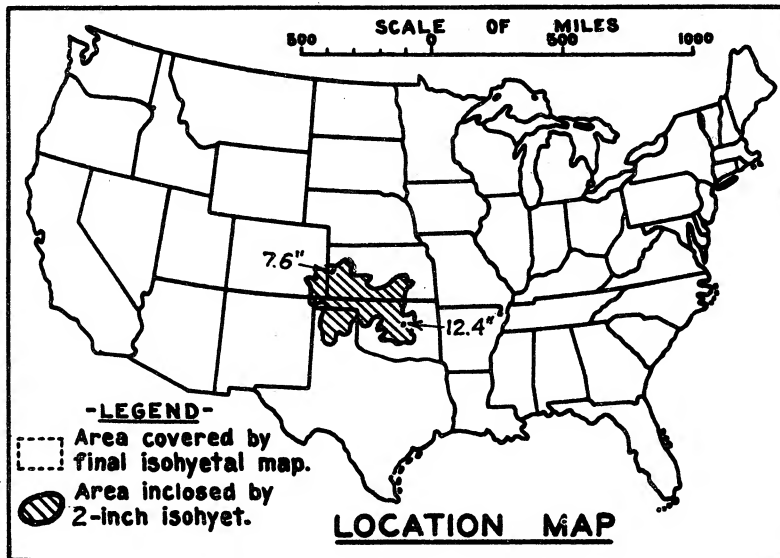
STORM STUDIES - ISOHYETAL MAP

Storm of October 9-12, 1930 Assignment SW 2-6
Study Prepared by: Tulsa Oklahoma District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 2-6, 1932

Assignment S W 2 - 7

Location Okla., Tex., Kans., & Colo.

Study Prepared by:

Southwestern Division

Tulsa District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/30/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/10/45

Remarks: TOTAL STORM AREA

Centers at: Meeker, Okla.,
and Tribune, Kans.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	4
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	9
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	17

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

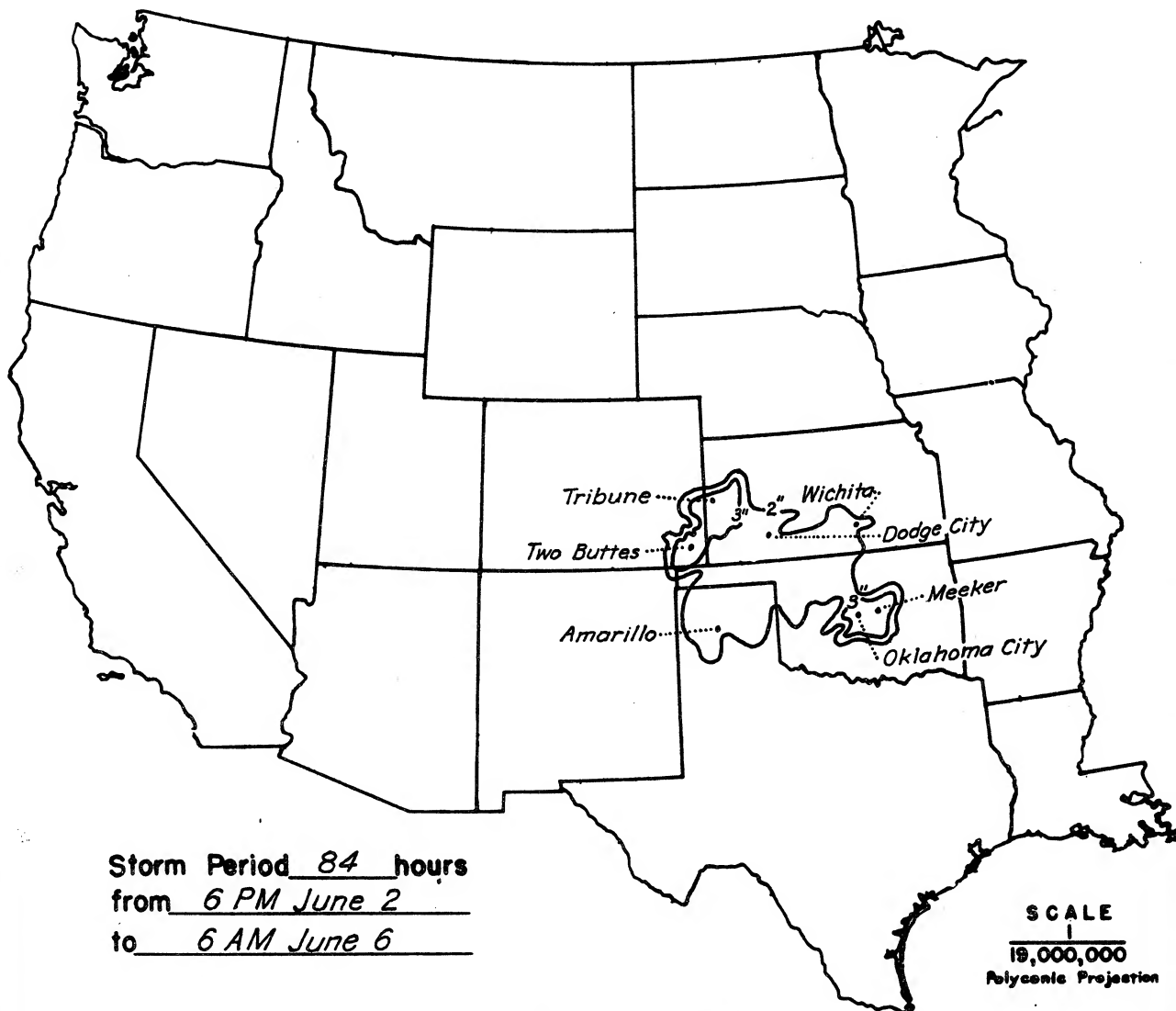
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

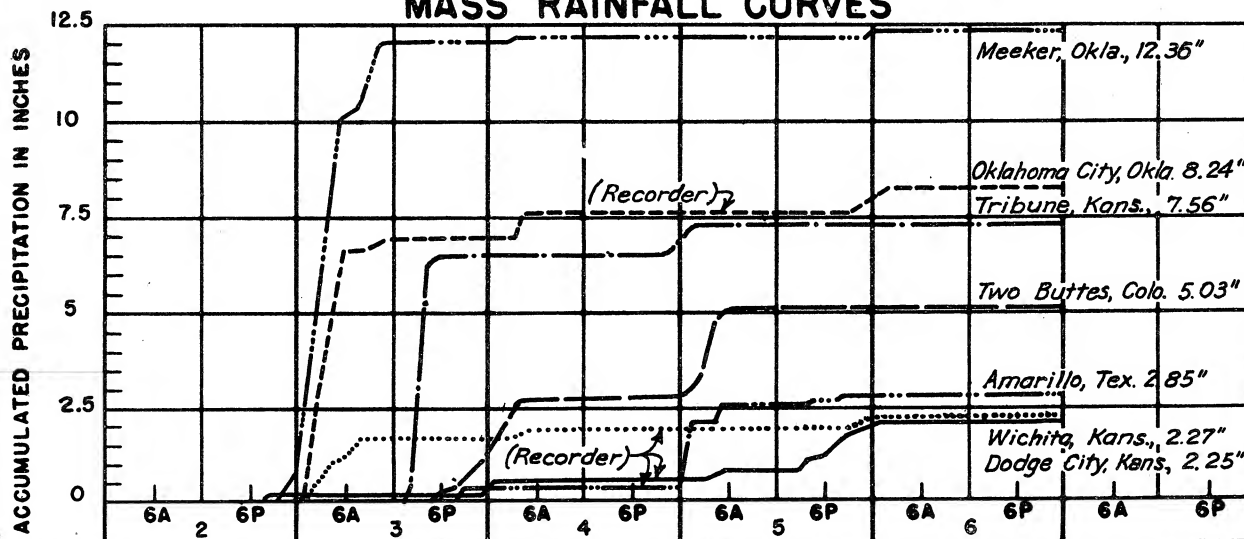
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	84	
Meeker, Okla.	9.8	12.0	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.4	
10	9.7	11.9	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.4	
100	8.9	10.9	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.5	
200	8.6	10.4	10.9	10.9	10.9	10.9	10.9	10.9	10.9	11.1	
500	7.8	9.4	9.9	9.9	9.9	9.9	9.9	9.9	9.9	10.2	
1,000	7.0	8.3	8.7	8.7	8.7	8.9	8.9	8.9	8.9	9.3	
2,000	5.9	6.9	7.2	7.2	7.2	7.5	7.5	7.5	7.5	7.9	
5,000	3.8	4.5	4.7	4.7	4.8	5.1	5.1	5.1	5.1	5.6	
10,000	2.3	2.9	3.1	3.2	3.3	3.4	3.4	3.4	3.8	4.1	
20,000	1.3	1.8	1.9	2.2	2.5	2.5	2.6	2.9	3.2	3.6	
50,000	0.7	1.0	1.1	1.5	1.9	2.0	2.2	2.8	3.1	3.3	
70,000	0.6	0.8	1.0	1.4	1.8	1.9	2.1	2.7	3.1	3.2	

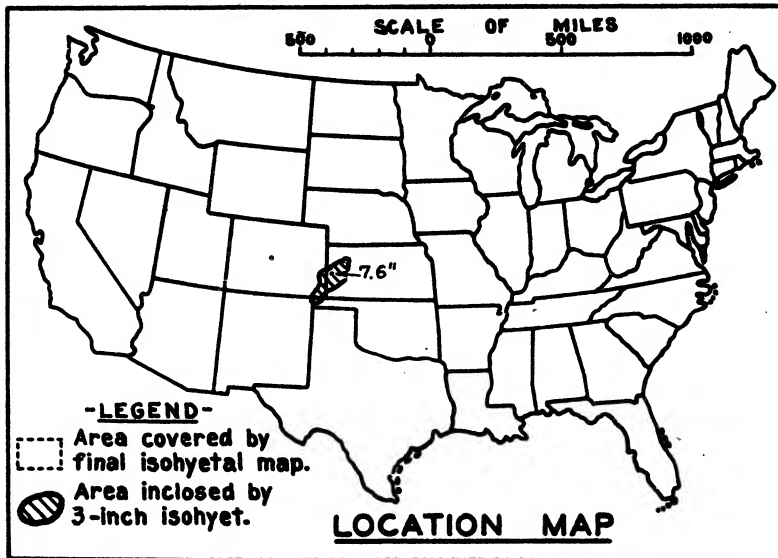
STORM STUDIES - ISOHYETAL MAP

Storm of June 2-6, 1932 Assignment SW 2-7
Study Prepared by: Tulsa, Okla. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 2 - 6, 1932
 Assignment S W 2 - 7 (a)
 Location Western Kans. and
 Study Prepared by: S.E.Col.
 Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 10/30/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/10/45
 Remarks: Table of Rainfall
 Data below is for:
 TRIBUNE, KANS. CENTER ONLY

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	4
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	9
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	17

PART II

Final isohyetal maps, in .1 sheet, scale 1 : 1,000,000

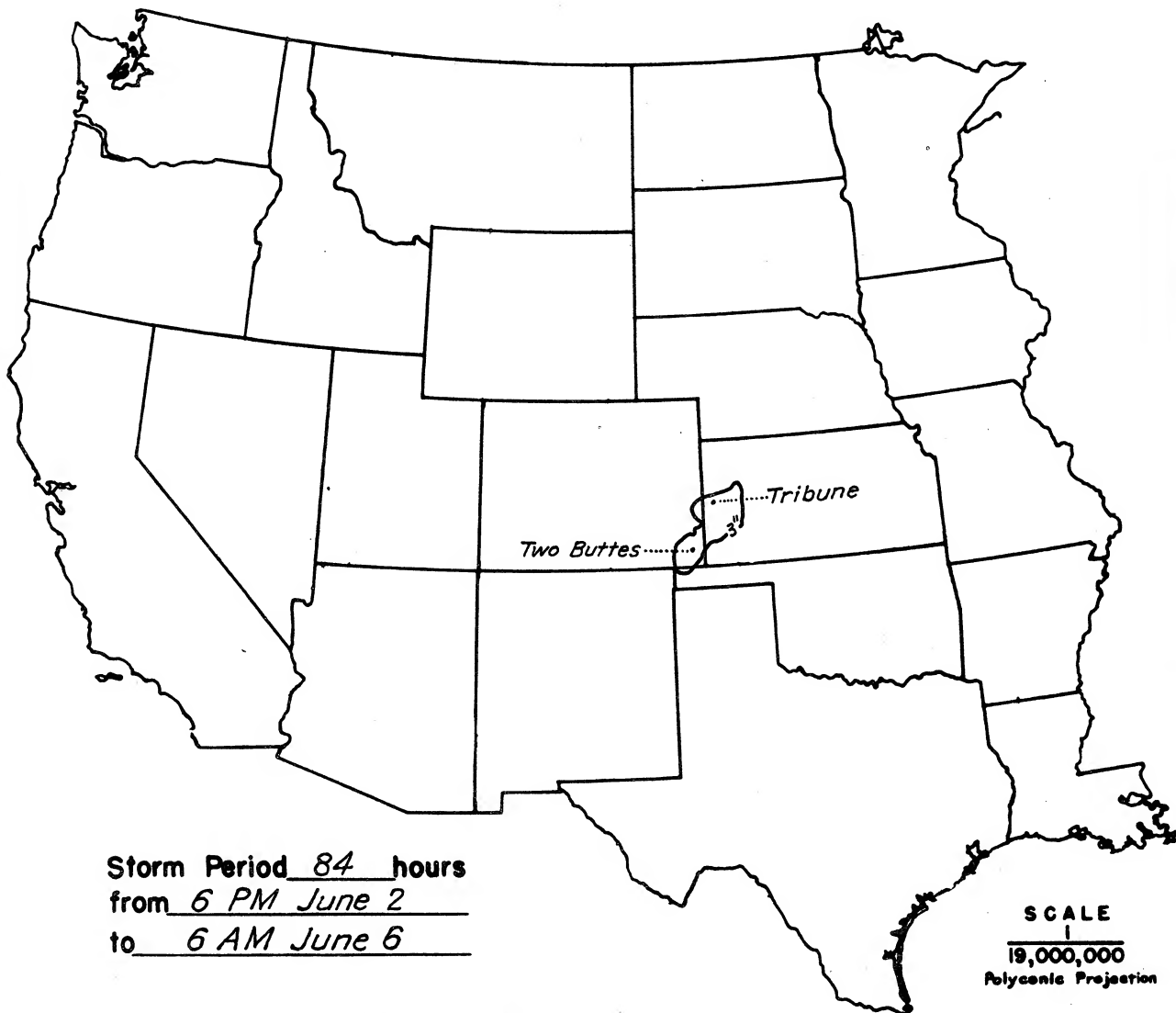
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	5
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	6
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

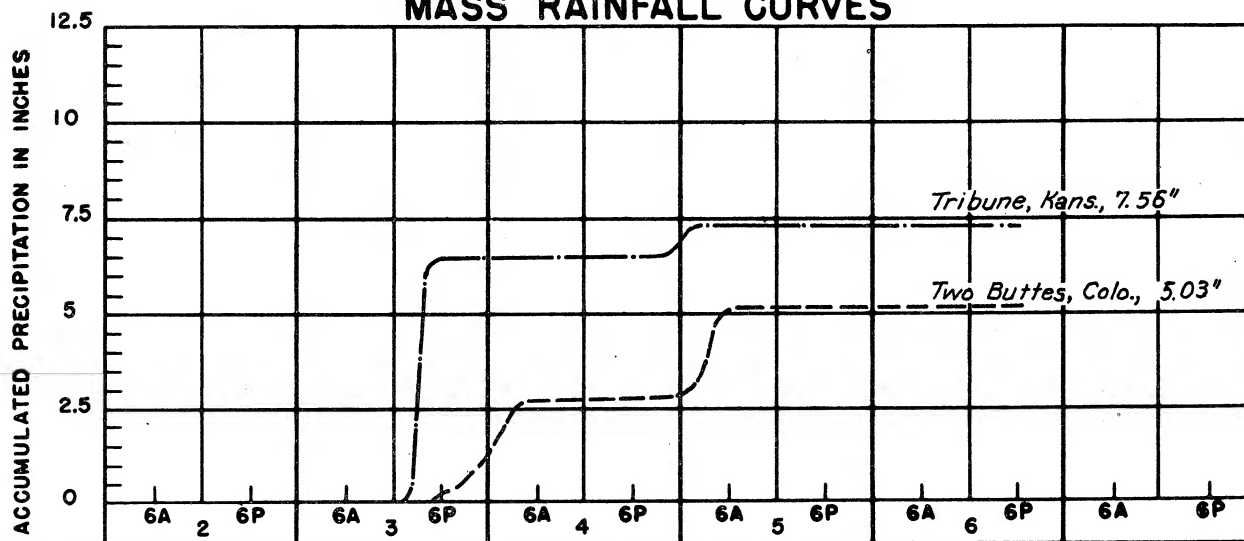
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

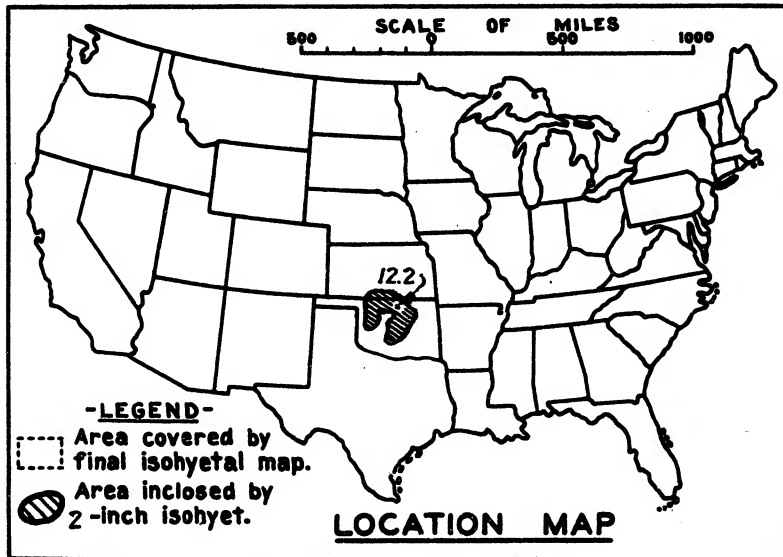
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	84	
Tribune, Kans.	6.5	6.5	6.5	6.5	6.5	7.4	7.6	7.6	
10	6.2	6.2	6.3	6.3	6.3	7.3	7.6	7.6	
100	4.9	5.0	5.4	5.4	5.4	6.4	7.4	7.4	
200	4.4	4.6	5.0	5.0	5.0	6.0	7.3	7.3	
500	3.7	4.0	4.6	4.6	4.6	5.5	7.0	7.0	
1,000	3.2	3.6	4.2	4.2	4.2	5.0	6.7	6.7	
2,000	2.6	3.1	3.8	3.8	3.8	4.5	5.8	5.8	
5,000	1.9	2.5	3.2	3.2	3.2	3.8	5.1	5.1	
7,500	1.5	2.2	2.9	2.9	2.9	3.6	4.6	4.6	

STORM STUDIES - ISOHYETAL MAP

Storm of June 2-6, 1932 Assignment SW 2-7(a)Study Prepared by: Tulsa, Okla. District
Southwestern DivisionStorm Period 84 hours
from 6 PM June 2
to 6 AM June 6SCALE
1
19,000,000
Polyconic Projection

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of August 15 - 17, 1932

Assignment S W 2 - 8

Location Oklahoma

Study Prepared by:

Southwestern Division

Tulsa District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 11/15/39

Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 4/21/42

Remarks: Center at:

Enid, Oklahoma

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	1
Form 5001-B (24-hour " ").....	14
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	5

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

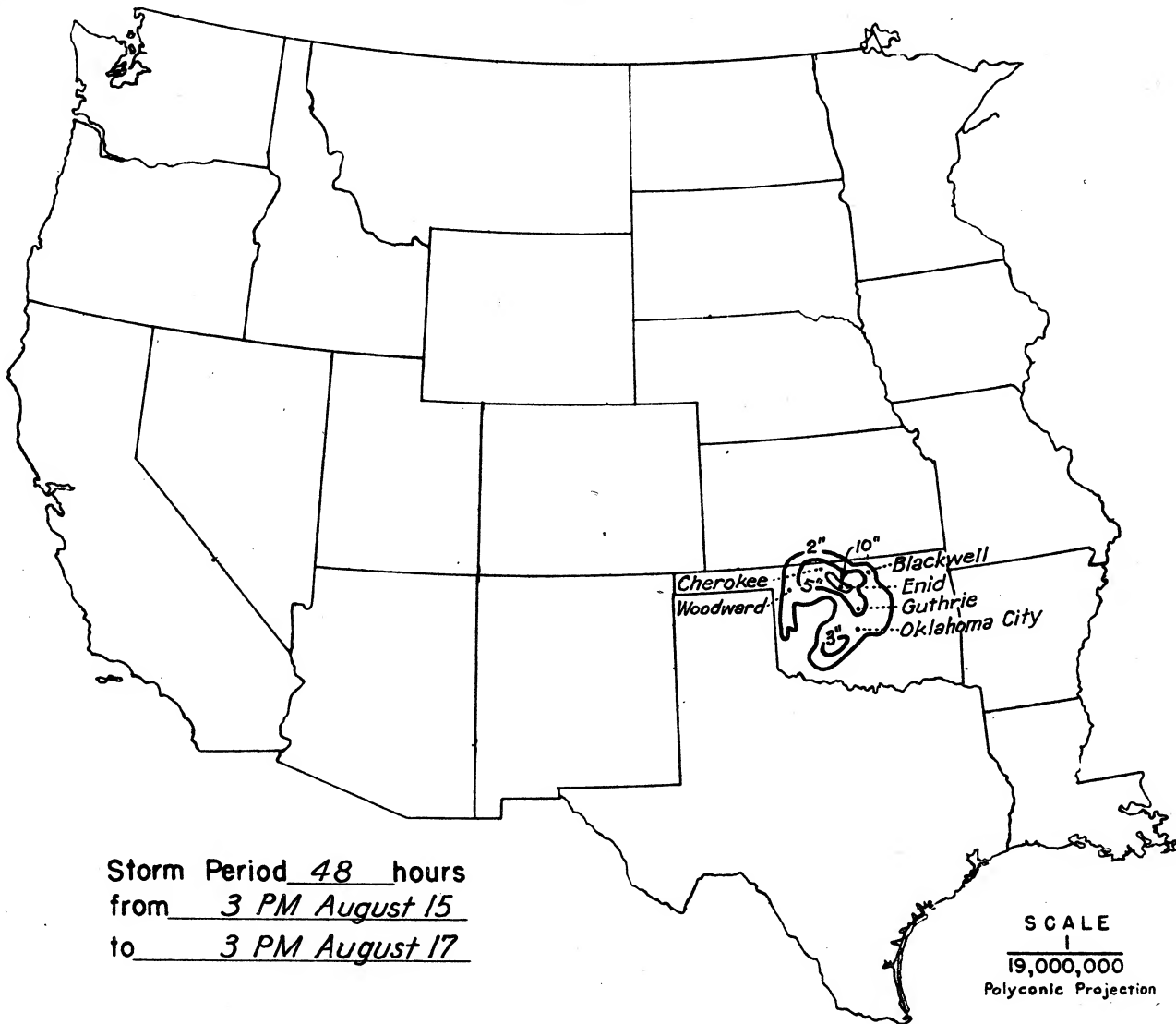
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	1
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	4
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

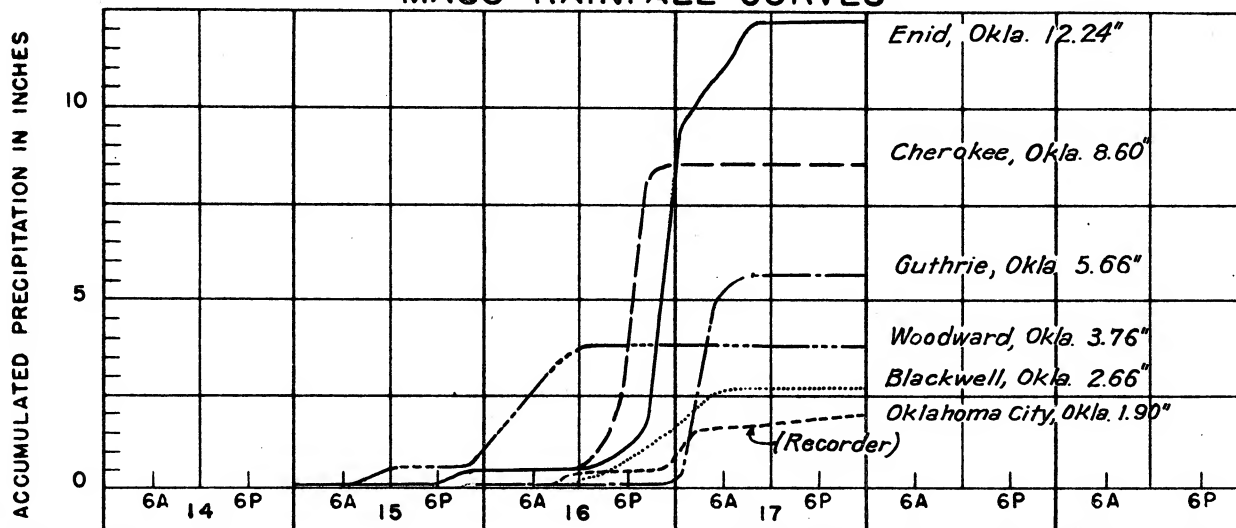
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

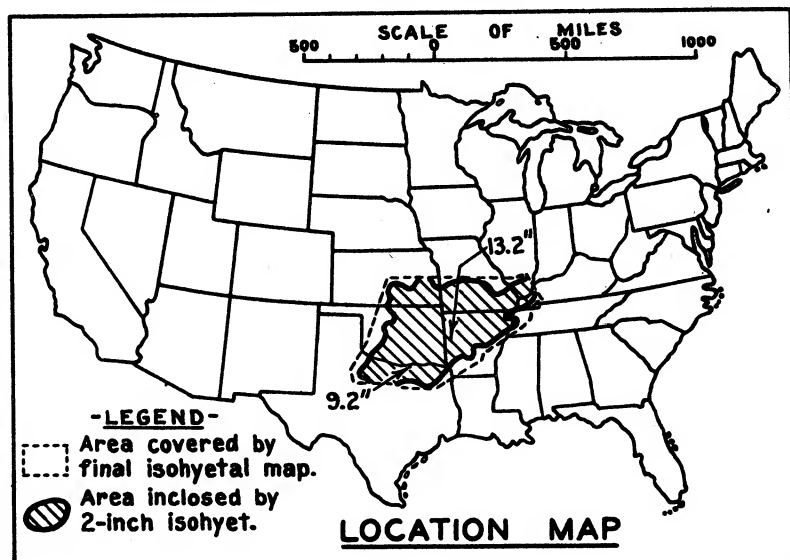
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	8.3	9.9	11.5	11.7	11.7	11.7	12.2					
100	7.2	8.9	10.6	10.8	10.9	10.9	11.4					
200	6.8	8.6	10.1	10.3	10.5	10.5	10.9					
500	6.1	8.1	9.4	9.5	9.6	9.7	10.1					
1,000	5.3	7.3	8.4	8.6	8.7	8.8	9.2					
2,000	4.4	6.3	7.2	7.4	7.6	7.8	8.2					
5,000	3.1	4.6	5.6	5.7	5.9	6.2	6.6					
9,000	2.3	3.5	4.4	4.6	4.8	5.0	5.3					

STORM STUDIES - ISOHYETAL MAP

Storm of August 15-17, 1932 Assignment SW 28Study Prepared by: Tulsa, Okla. District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 12-18, 1935
 Assignment SW 2-13
 Location Texas - Kentucky
 Study Prepared by:
 Southwestern Division
 Little Rock District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 3/13/40
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/10/44
 Remarks: Centers at
 Waldron, Ark., and
 Durant, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	15
Form 5001-B (24-hour " ").....	60
Form 5001-D (" " " ").....	-
Miscl. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	57

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

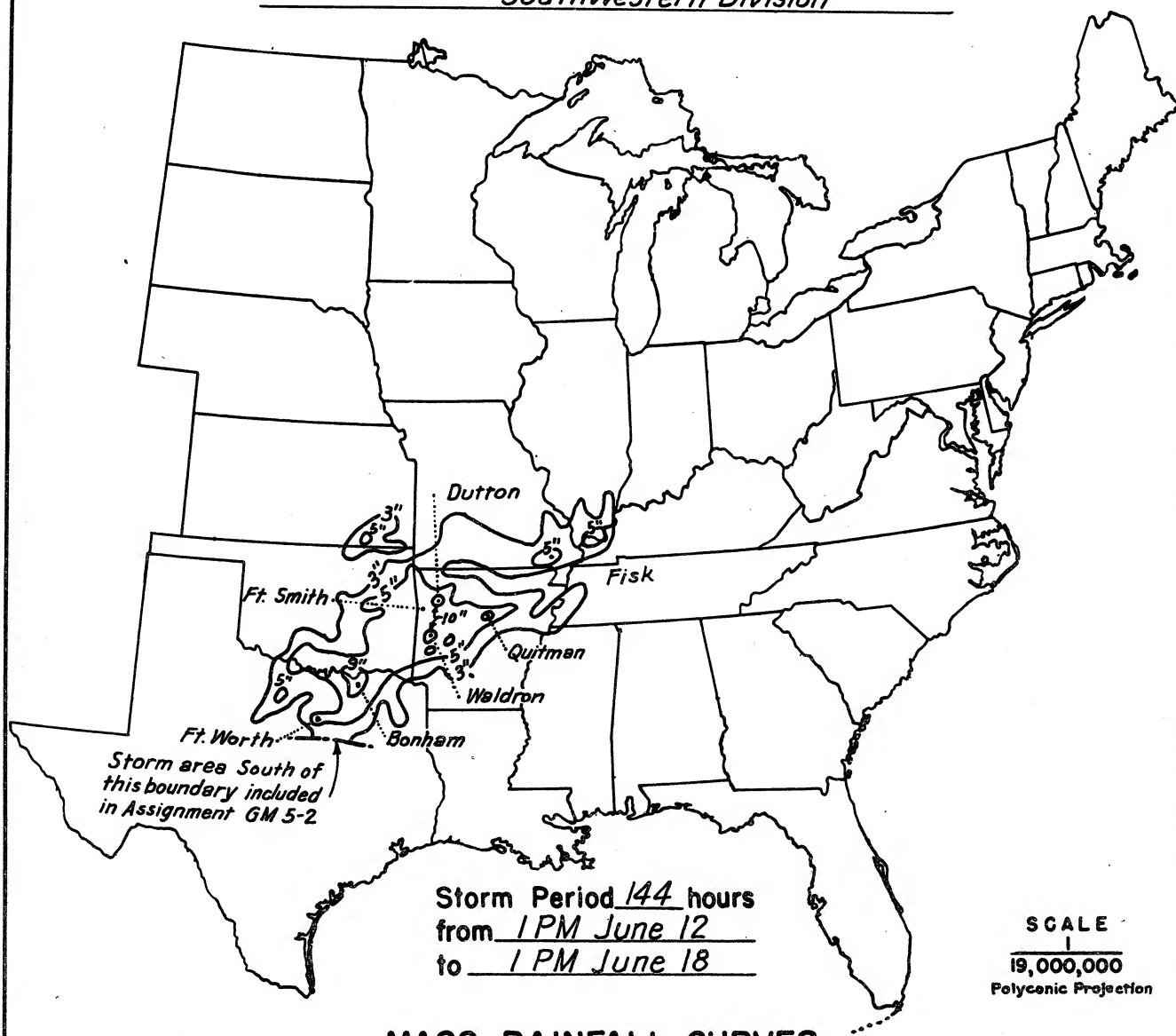
Form S-10 (Data from mass rainfall curves).....	10
Form S-11 (Depth-area data from isohyetal map).....	3
Form S-12 (Maximum depth-duration data).....	17
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	4

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

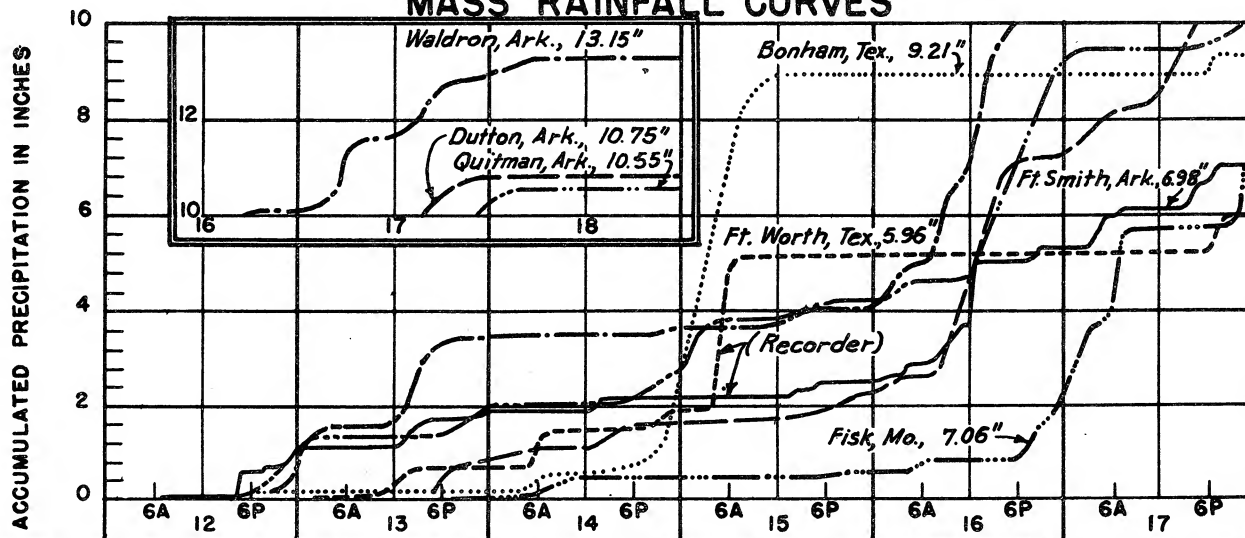
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	72	96	120	144
10	4.5	7.6	8.1	8.3	8.5	8.8	8.8	9.6	10.1	12.7	13.2
100	4.2	7.0	7.7	7.9	8.1	8.4	8.5	9.2	9.6	11.7	12.4
200	4.0	6.8	7.4	7.6	7.8	8.1	8.3	8.9	9.1	11.0	11.6
500	3.8	6.3	7.0	7.2	7.4	7.7	7.9	8.4	8.6	9.7	10.4
1,000	3.5	5.9	6.6	6.7	6.9	7.2	7.5	7.9	8.3	9.3	9.9
2,000	3.2	5.4	6.1	6.2	6.4	6.7	7.1	7.7	8.3	9.2	9.5
5,000	2.7	4.6	5.3	5.4	5.5	5.9	6.3	7.4	8.1	8.9	9.1
10,000	2.3	3.9	4.6	4.7	4.8	5.1	5.7	7.0	7.8	8.4	8.7
20,000	1.8	3.1	3.7	3.9	4.0	4.3	4.9	6.3	7.1	7.7	7.9
50,000	1.1	1.8	2.3	2.7	2.8	3.1	3.7	4.9	5.7	6.3	6.4
100,000	0.5	0.8	1.1	1.6	1.8	2.1	2.7	3.7	4.3	4.9	5.0

STORM STUDIES - ISOHYETAL MAP

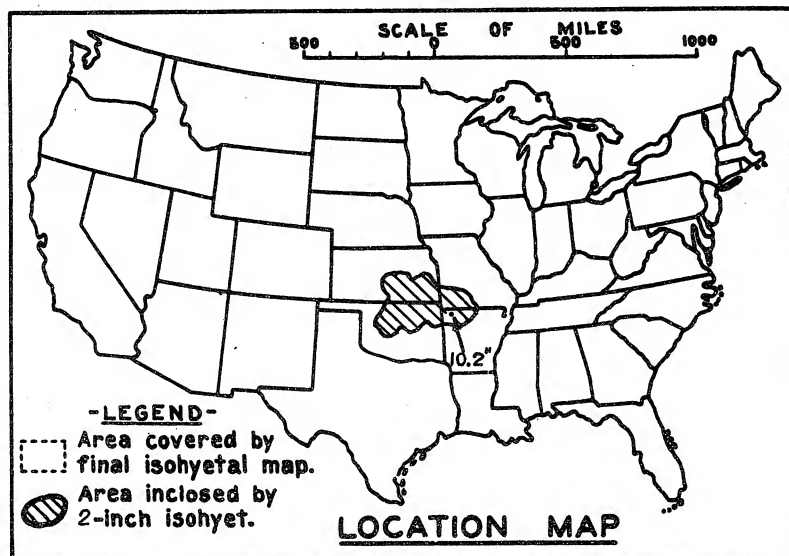
Storm of June 12-18, 1935 Assignment SW 2-13
 Study Prepared by: Little Rock, Ark. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET



Storm of September 6-10, 1937

Assignment S W 2 - 15

Location Kans. Okla. Ark. Mo.

Study Prepared by:

Southwestern Division

Tulsa District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 9/1/42

Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 3/19/45

Remarks: TOTAL STORM AREA

Centers at: Bentonville, Ark. and Cherokee, Okla.

DATA AND COMPUTATIONS COMPILEDPART I

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	7
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	15

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

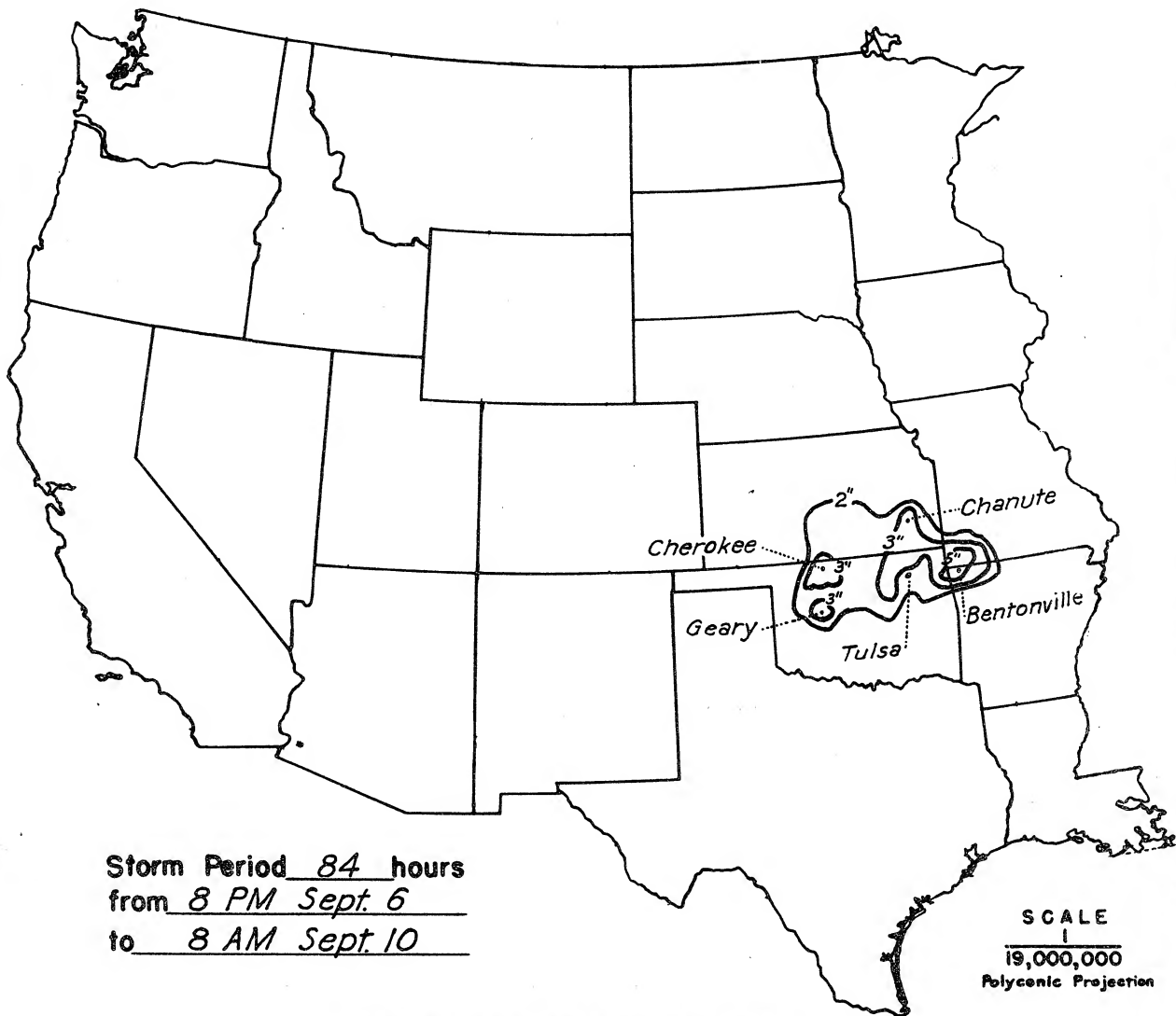
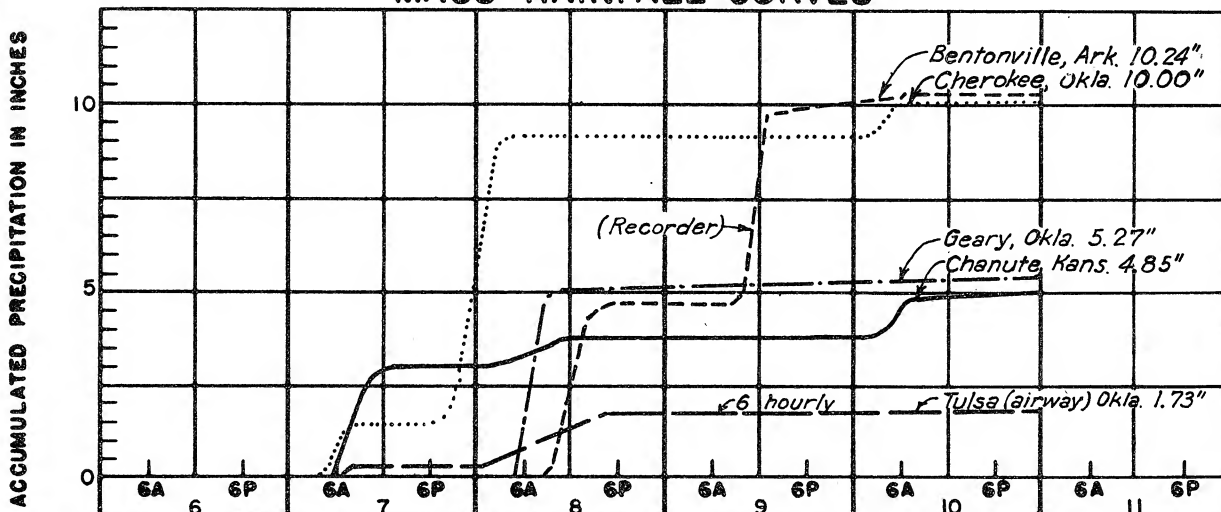
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

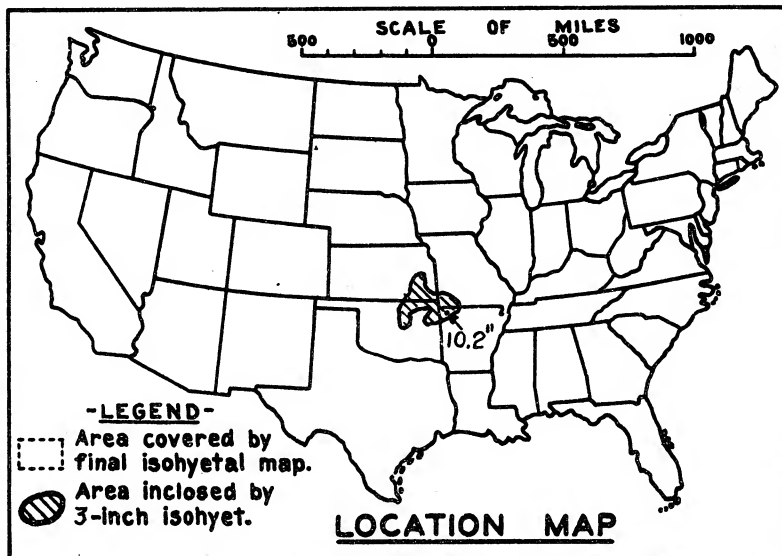
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	84	
10	7.4	7.4	7.5	8.8	9.7	9.9	10.2	10.2	10.2	10.2	
100	6.9	6.9	7.0	8.2	9.2	9.4	9.7	9.7	9.7	9.7	
200	6.6	6.7	6.8	7.9	8.8	9.0	9.2	9.3	9.3	9.3	
500	5.9	6.0	6.1	7.1	8.0	8.3	8.5	8.6	8.6	8.6	
1,000	5.1	5.2	5.3	6.1	7.2	7.4	7.7	7.9	7.9	7.9	
2,000	3.9	4.1	4.2	4.7	6.3	6.6	6.8	7.1	7.2	7.2	
5,000	2.5	2.9	3.0	3.2	4.8	5.2	5.4	5.8	5.9	6.0	
10,000	1.7	2.2	2.3	2.4	3.8	4.2	4.3	4.6	4.8	4.9	
20,000	1.2	1.6	1.8	1.9	2.7	3.1	3.2	3.5	3.6	3.8	
42,750	0.7	1.2	1.5	1.6	1.7	2.0	2.3	2.7	2.9	3.1	

STORM STUDIES - ISOHYETAL MAP

Storm of September 6-10, 1937 Assignment SW 2-15
Study Prepared by: Tulsa, Okla. District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 6-10, 1937
 Assignment S W 2 - 15 (a)
 Location Kans. Okla. Ark. Mo.
 Study Prepared by:

Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/1/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/19/45

Remarks:

EASTERN AREA ONLY

Center at : Bentonville, Ark.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data).....	7
Form 5001-B (24-hour " ").....	-
Form 5001-D (" " " ").....	7
Misc. precip. records, meteorological data, etc.....	-
Form 5002 (Mass rainfall curves).....	15

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

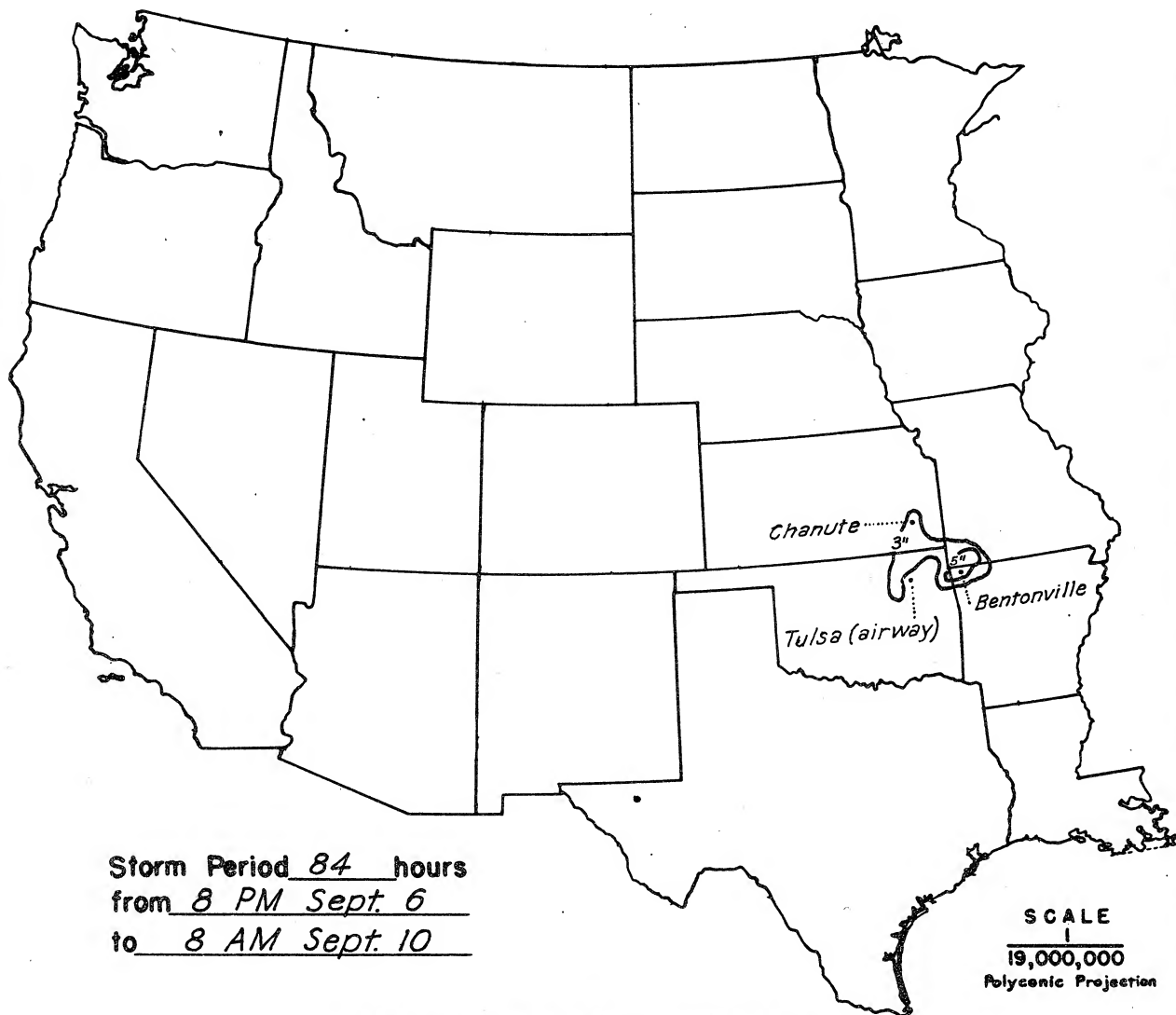
Data and computation sheets:

Form S-10 (Data from mass rainfall curves).....	5
Form S-11 (Depth-area data from isohyetal map).....	2
Form S-12 (Maximum depth-duration data).....	7
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

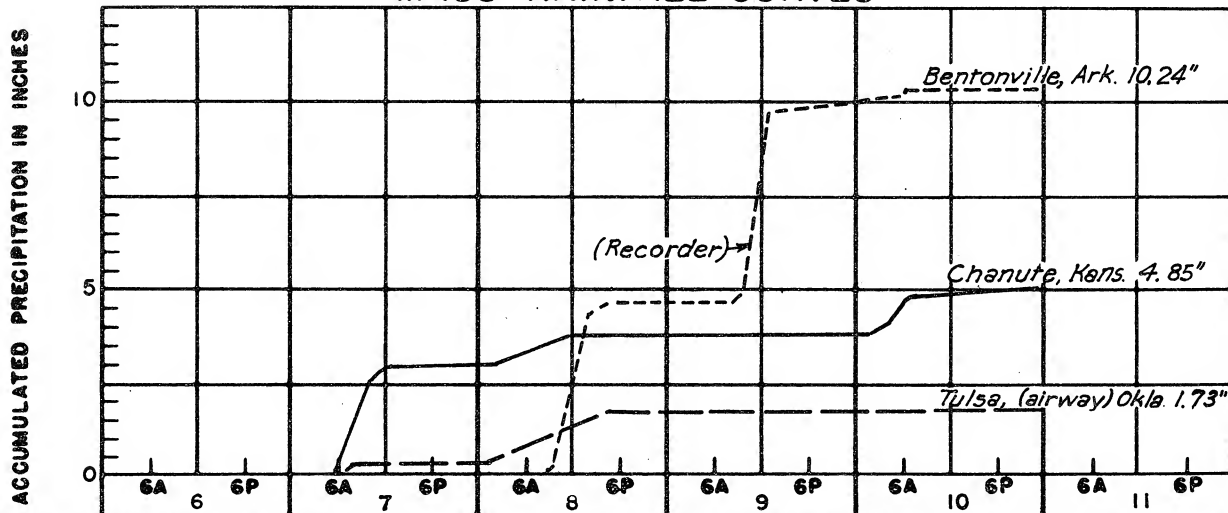
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

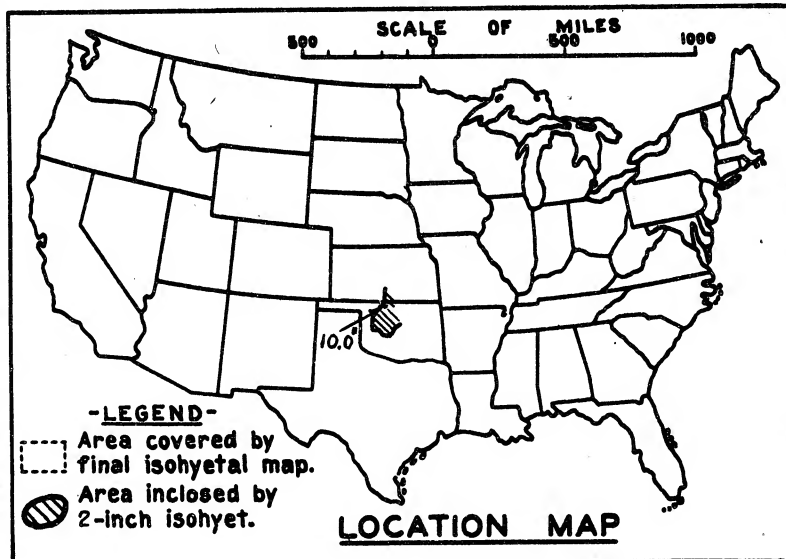
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	84	
Max. Station	5.2	5.8	5.9	6.0	9.7	9.9	10.2	10.2	10.2	10.2	
10	5.1	5.7	5.8	5.9	9.7	9.9	10.2	10.2	10.2	10.2	
100	4.6	5.2	5.3	5.4	9.2	9.4	9.7	9.7	9.7	9.7	
200	4.4	5.0	5.1	5.2	8.8	9.0	9.2	9.3	9.3	9.3	
500	4.1	4.5	4.6	4.7	8.0	8.3	8.5	8.6	8.6	8.6	
1,000	3.7	4.1	4.2	4.3	7.2	7.4	7.6	7.9	7.9	7.9	
2,000	3.2	3.5	3.7	3.7	6.3	6.6	6.8	7.1	7.2	7.2	
2,500	3.0	3.3	3.5	3.6	6.0	6.3	6.5	6.8	6.9	6.9	

STORM STUDIES - ISOHYETAL MAP

Storm of September 6-10, 1937 Assignment SW 2-15 (a)Study Prepared by: Tulsa, Okla. District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 6-10, 1937
 Assignment S W 2 - 15 (b)
 Location Kans. Okla. Ark. Mo.
 Study Prepared by:

Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/1/42
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/19/45

Remarks:

WESTERN AREA ONLY

Center at ; Cherokee, Okla.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	7
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	15

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

Data and computation sheets:

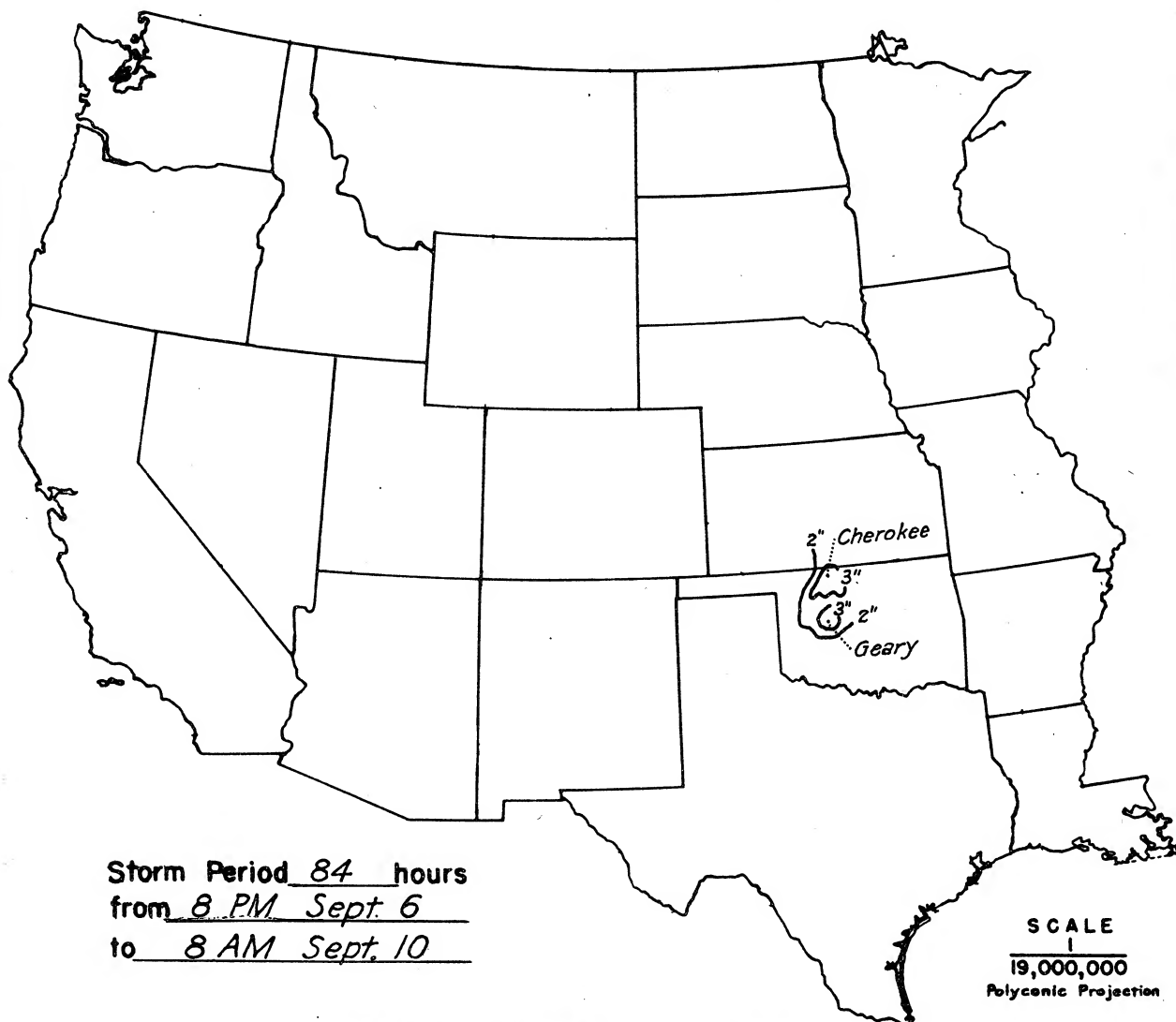
Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	3
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

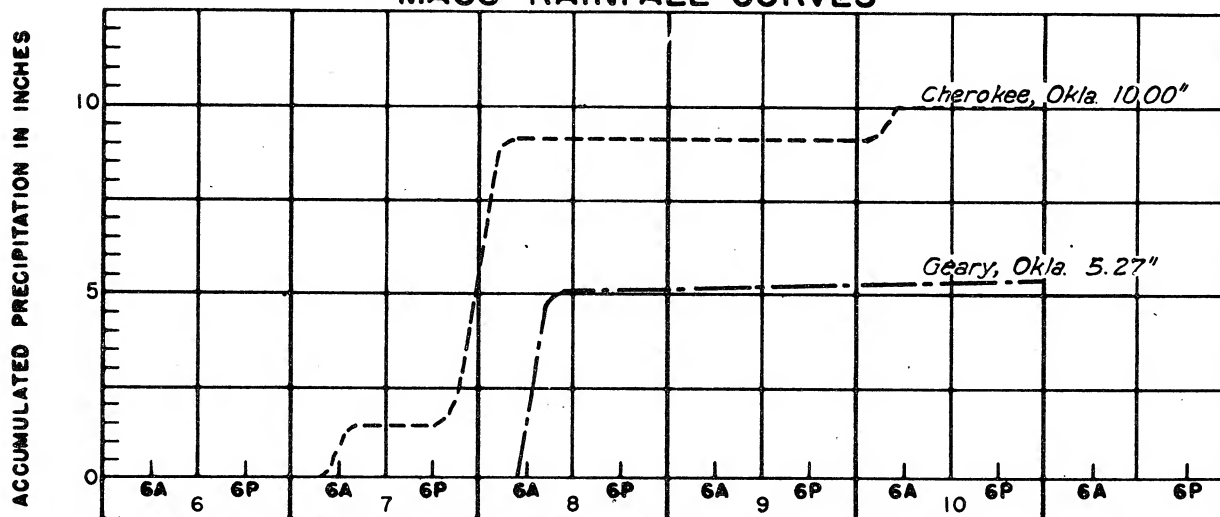
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
Max. Station	7.5	7.5	7.6	8.9	8.9	8.9	8.9	8.9	9.5	10.0
10	7.4	7.4	7.5	8.8	8.8	8.8	8.8	8.8	9.4	9.9
100	6.9	6.9	7.0	8.1	8.1	8.1	8.1	8.1	8.5	9.3
200	6.6	6.6	6.7	7.7	7.7	7.7	7.7	7.7	8.1	8.9
500	5.9	6.0	6.1	7.0	7.0	7.0	7.0	7.1	7.3	8.1
1,000	5.1	5.2	5.3	6.1	6.2	6.2	6.3	6.3	6.5	7.1
2,000	3.9	4.1	4.2	4.7	4.9	4.9	4.9	5.0	5.3	5.9
2,500	3.5	3.7	3.8	4.3	4.5	4.5	4.5	4.6	4.8	5.4

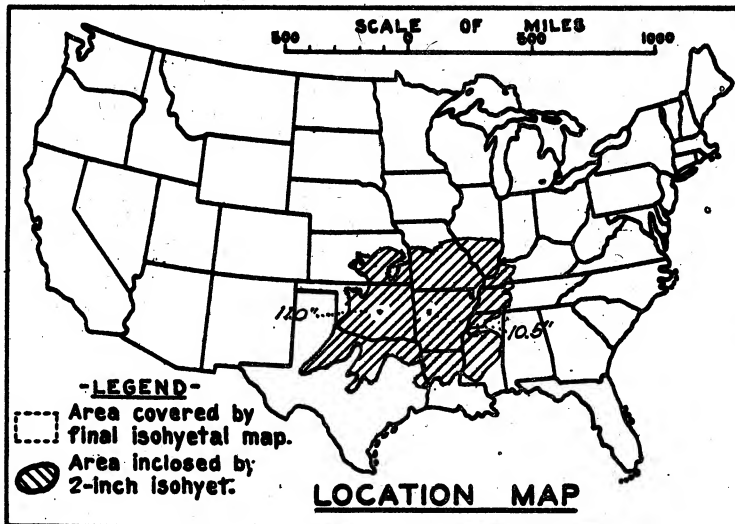
STORM STUDIES - ISOHYETAL MAP

Storm of September 6-10, 1937 Assignment SW 2-15(b)
Study Prepared by: Tulsa, Okla. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 14-19 February 1938
 Assignment SW 2 - 17
 Location Ark., Mo., La., Tex., Okla.,
 Kans., Ill., Ky., Tenn., & Miss.

Study Prepared by:
 Southwestern Division
 Little Rock District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/27/43

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/17/46

Remarks: Centers at
 Calvin, Oklahoma, and
 Devils Knob, Arkansas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	51
Form 5001-B (24-hour " " " ")-----	76
Form 5001-D (" " " " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	4
Form 5002 (Mass rainfall curves)-----	76

PART II

Final isohyetal maps, in 2 sheets, scale 1:1,000,000

Data and computation sheets:

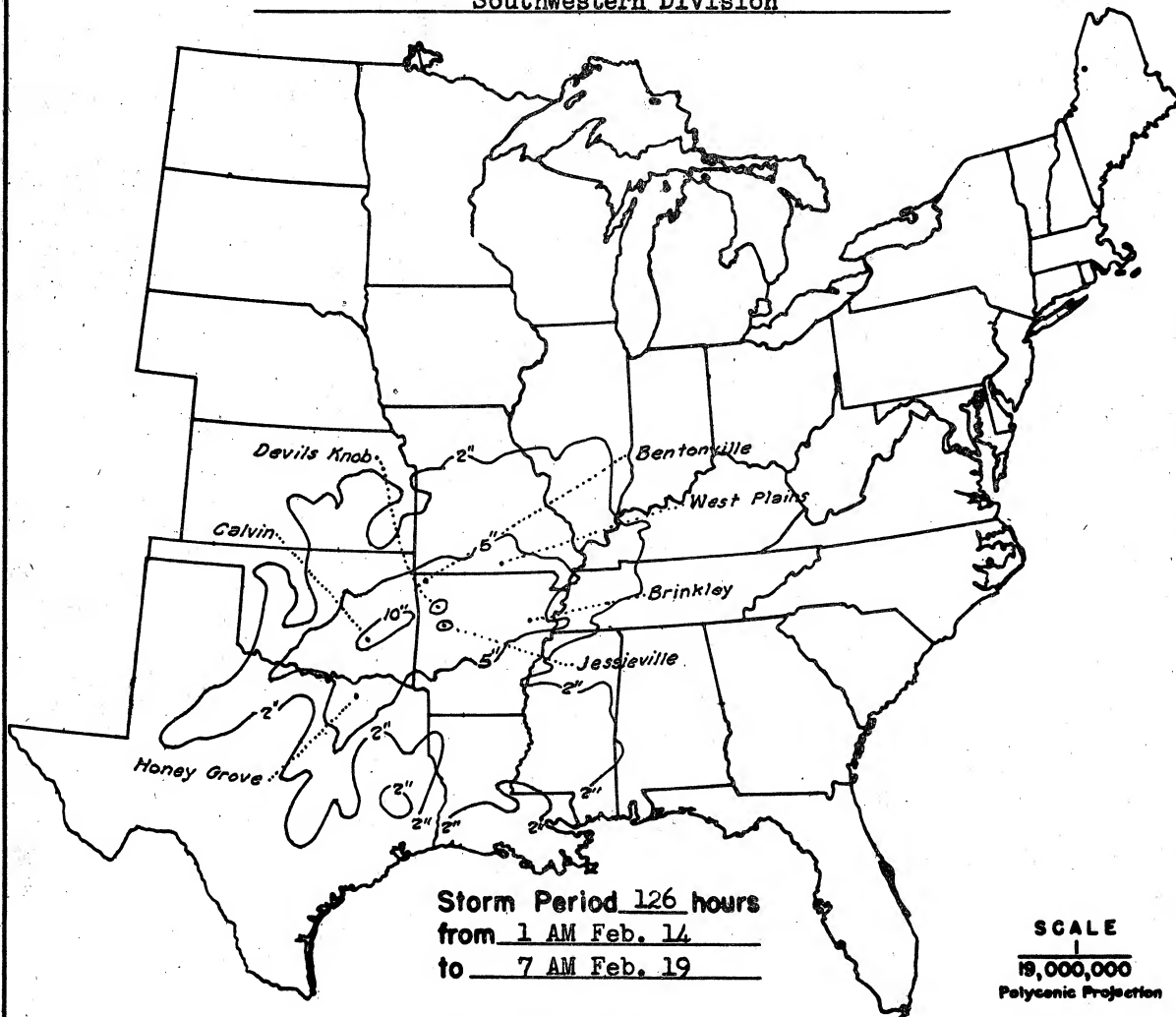
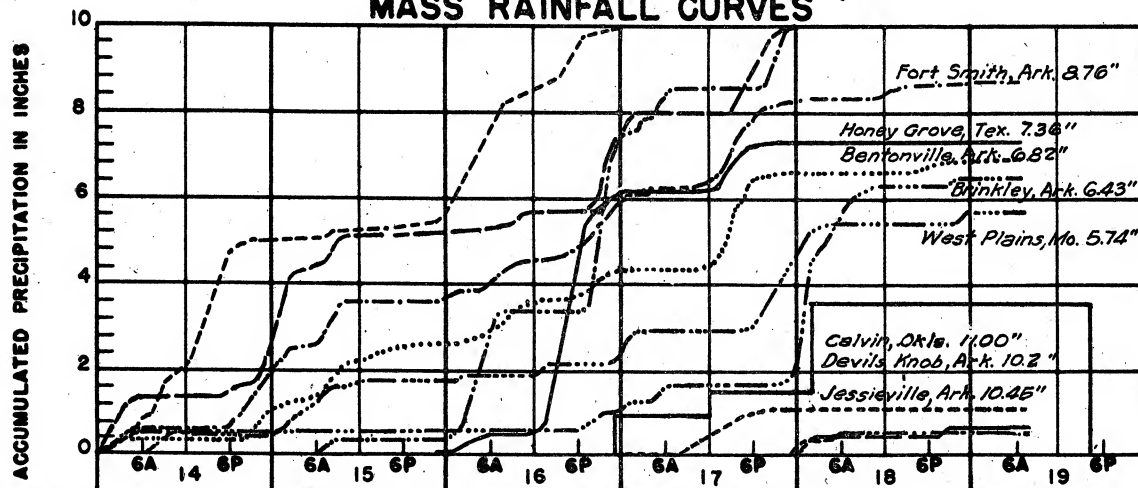
Form S-10 (Data from mass rainfall curves)-----	19
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	19
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	5

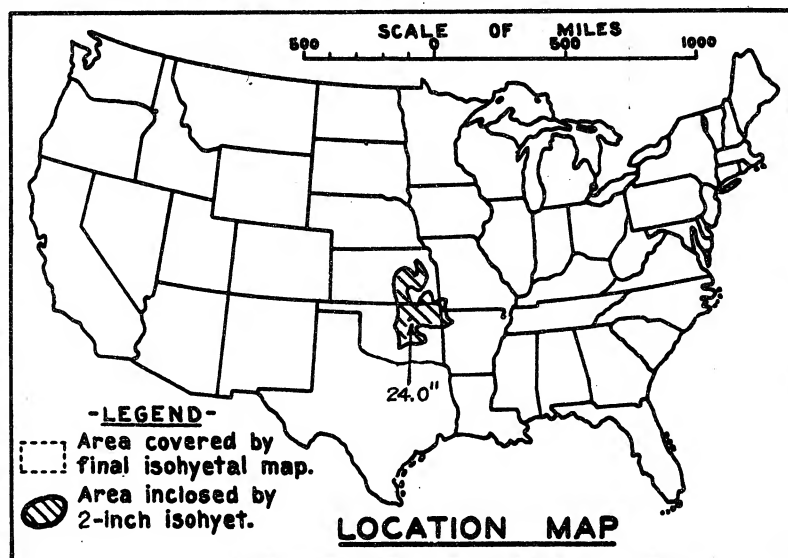
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	4.8	5.6	5.7	7.0	8.1	8.2	9.7	10.1	10.4	11.0	11.0
100	3.9	4.8	5.0	6.4	7.4	7.5	8.9	9.4	9.7	10.8	10.9
200	3.5	4.5	4.8	5.9	7.0	7.1	8.6	9.1	9.4	10.7	10.9
500	3.1	4.2	4.6	5.2	6.3	6.5	8.0	8.5	9.0	10.5	10.8
1,000	2.9	4.1	4.5	4.7	6.0	6.3	7.3	8.0	8.6	10.4	10.6
2,000	2.7	4.0	4.3	4.4	5.8	6.1	6.8	7.6	8.4	10.2	10.5
5,000	2.6	3.5	3.8	3.9	5.4	5.8	6.2	7.2	8.0	9.7	10.0
10,000	2.5	3.2	3.4	3.5	5.0	5.5	5.9	6.7	7.6	9.2	9.8
20,000	1.8	2.7	3.0	3.1	4.3	4.8	5.3	5.9	6.7	8.2	8.7
50,000	1.1	1.8	2.3	2.6	3.4	3.9	4.8	5.2	5.7	7.1	7.6
100,000	0.9	1.5	2.0	2.4	2.8	3.3	4.0	4.4	4.8	6.0	6.5
150,000	0.7	1.3	1.8	2.1	2.3	2.8	3.3	3.7	4.0	5.0	5.5

STORM STUDIES - ISOHYETAL MAP

Storm of February 14-19, 1938 Assignment SW 2-17
 Study Prepared by: Little Rock, Ark. District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 2 - 6, 1940
 Assignment S W 2 - 18
 Location Okla. Kans. Mo. & Ark.
 Study Prepared by:
 Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 8/18/41
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/25/43
 Remarks: Centers at;
 Hallett, Okla. and Lebo, Kans.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 1,000,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 38
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 23
 Misl. precip. records, meteorological data, etc.----- 1
 Form 5002 (Mass rainfall curves)----- 49

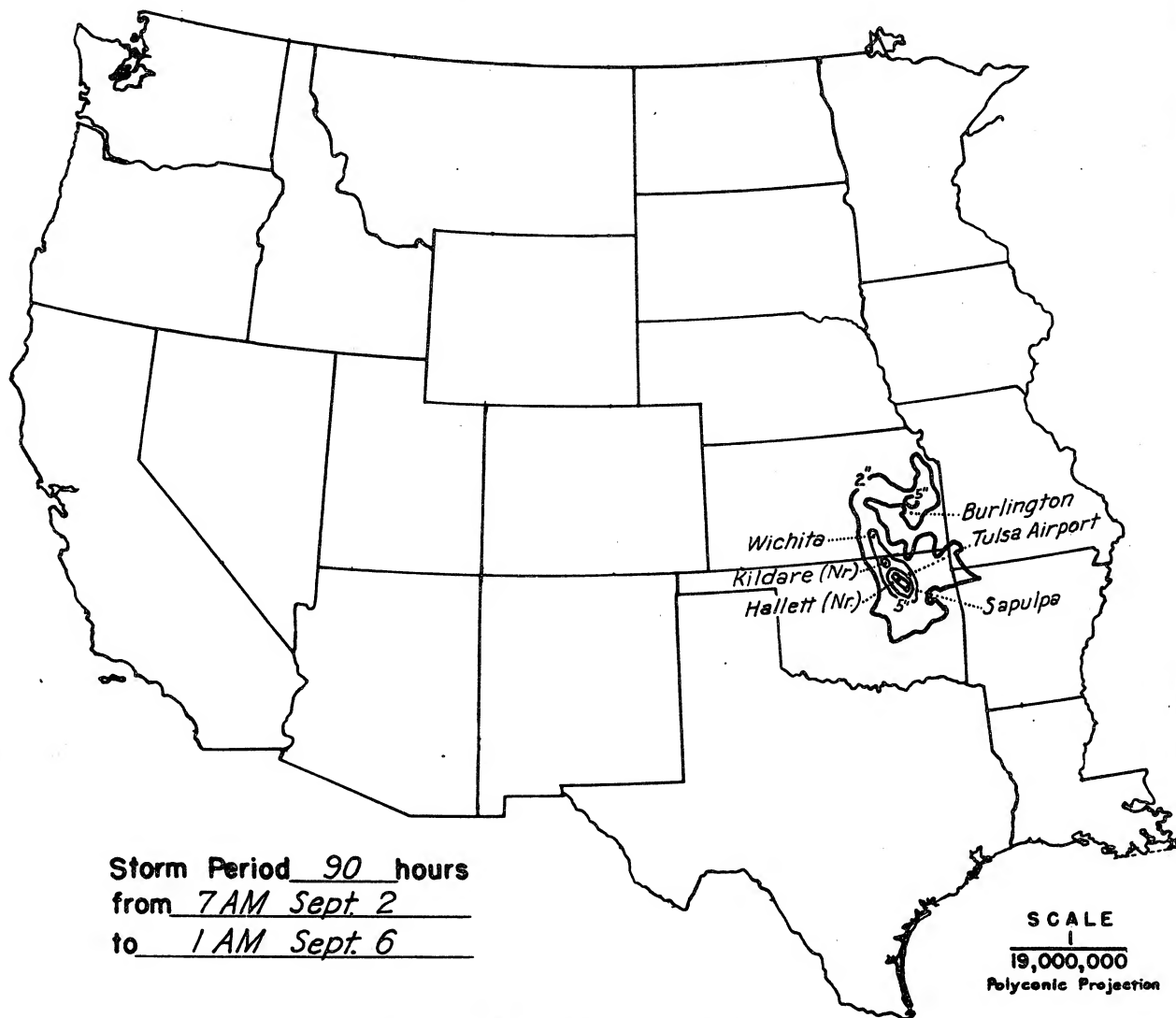
PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 9
 Form S-11 (Depth-area data from isohyetal map)----- 3
 Form S-12 (Maximum depth-duration data)----- 11
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- 2

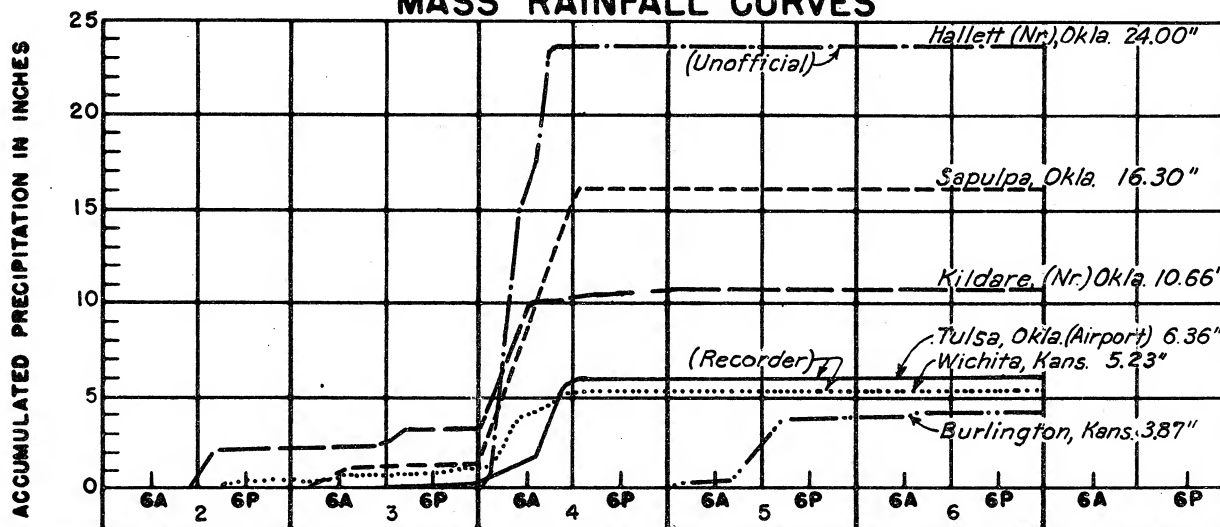
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

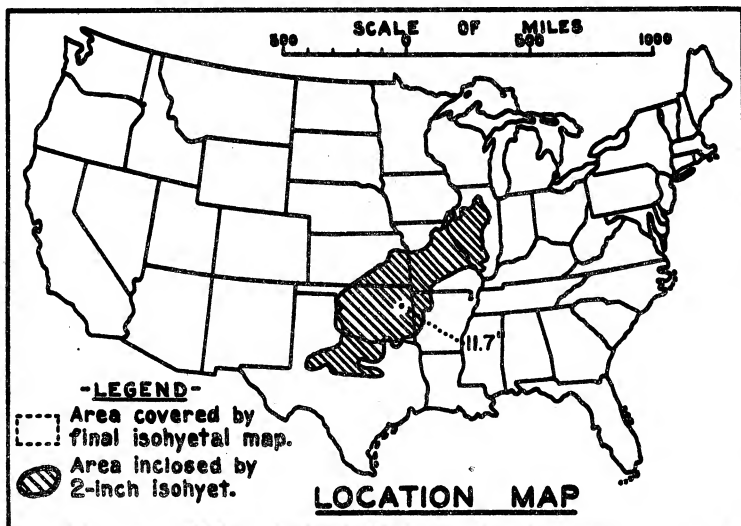
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	54	90	
Max. Station	18.9	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	
10	18.4	23.4	23.6	23.6	23.6	23.6	23.6	23.6	23.6	
100	14.7	19.2	19.4	19.6	19.7	19.8	19.8	19.8	19.8	
200	12.5	17.6	17.8	18.0	18.1	18.2	18.3	18.3	18.3	
500	9.7	15.4	15.6	15.7	15.8	16.1	16.2	16.2	16.2	
1,000	7.9	13.3	13.4	13.6	13.7	14.0	14.1	14.1	14.1	
2,000	6.2	10.3	10.5	10.7	10.9	11.1	11.3	11.3	11.3	
5,000	4.3	7.3	7.4	7.5	7.7	7.8	7.9	8.0	8.0	
10,000	3.0	5.3	5.4	5.5	5.6	5.7	5.8	5.9	5.9	
15,000	2.4	4.4	4.5	4.7	4.7	4.8	4.9	5.1	5.1	
20,000	2.0	3.9	4.1	4.2	4.3	4.4	4.5	4.6	4.6	

STORM STUDIES - ISOHYETAL MAP

Storm of September 2-6, 1940 Assignment SW 2-18Study Prepared by: Tulsa, Okla. DistrictSouthwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 13-19 April 1941

Assignment SW 2-19

Location Okla., Mo., Ark., Kans., Tex.

Study Prepared by: Ill., and Iowa

Southwestern Division
Tulsa District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 6/14/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/17/47Remarks: Center near
Haskell, Oklahoma**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	262
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	68
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	86

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

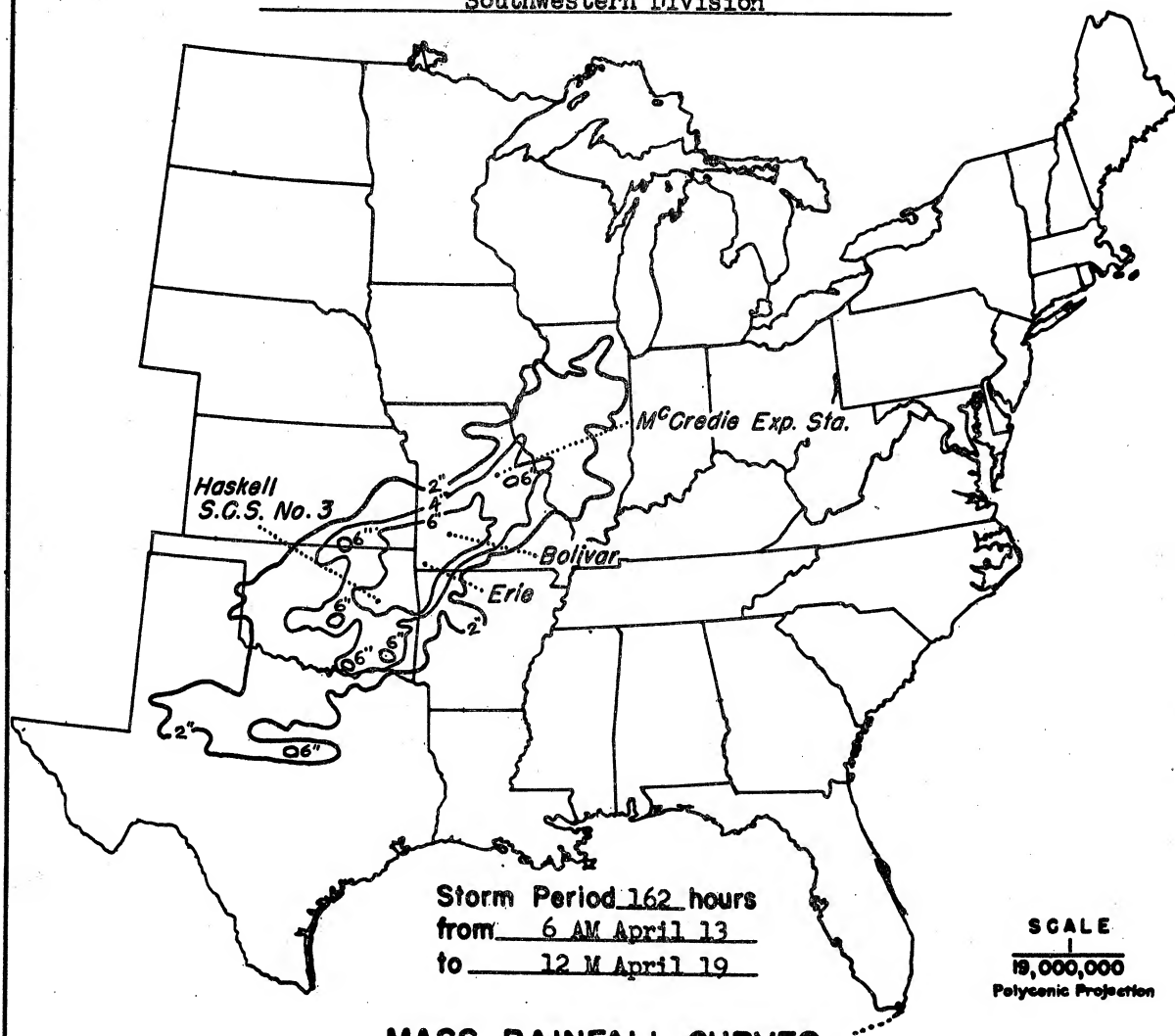
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	27
Form S-11 (Depth-area data from isohyetal map)-----	5
Form S-12 (Maximum depth-duration data)-----	7
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

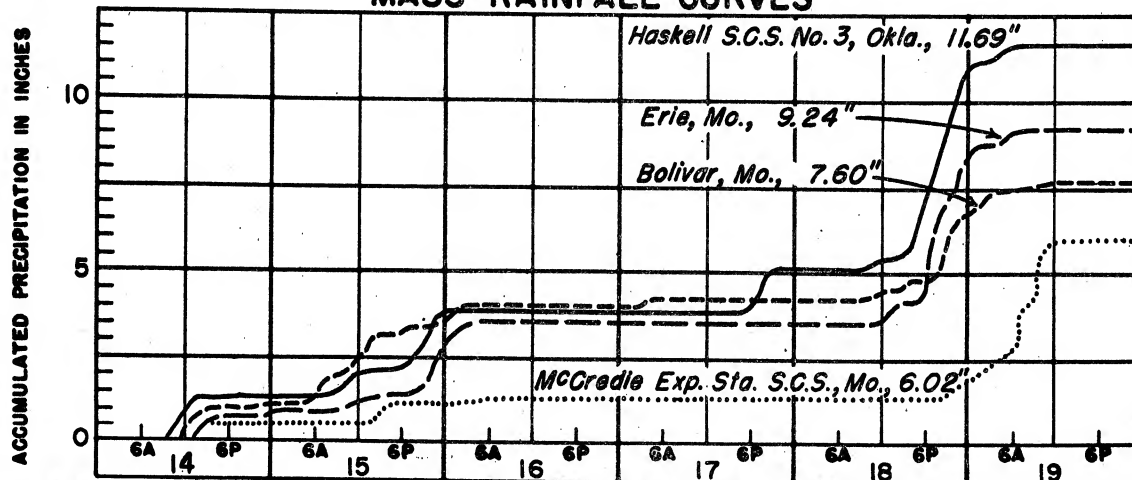
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

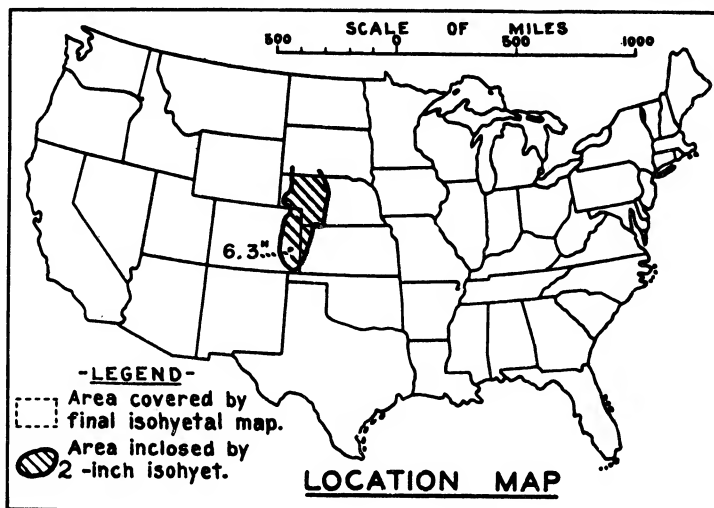
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	144
10	5.9	6.5	7.1	7.1	7.1	7.7	7.8	7.8	7.8	10.4	11.7
100	4.9	5.5	6.4	6.5	6.5	7.0	7.2	7.2	7.2	9.6	10.9
200	4.6	5.3	6.1	6.3	6.3	6.8	6.9	6.9	6.9	9.4	10.7
500	4.2	4.9	5.7	6.0	6.1	6.4	6.5	6.6	6.6	9.0	10.3
1,000	3.9	4.6	5.4	5.7	5.8	6.0	6.1	6.2	6.3	8.8	10.0
2,000	3.6	4.3	5.0	5.4	5.5	5.6	5.7	5.8	6.0	8.5	9.6
5,000	3.2	3.9	4.4	4.8	4.9	4.9	5.0	5.1	5.3	7.8	8.9
10,000	2.6	3.4	3.8	4.2	4.3	4.3	4.4	4.5	4.6	7.1	8.4
20,000	2.0	2.8	3.1	3.5	3.6	3.6	3.9	4.0	4.1	6.3	7.7
40,000	1.4	2.1	2.5	2.8	3.0	3.0	3.3	3.4	3.5	5.3	6.7
50,000	1.2	1.9	2.2	2.5	2.7	2.7	3.1	3.2	3.3	5.0	6.3
65,000	0.9	1.7	2.0	2.2	2.5	2.5	2.9	3.0	3.1	4.6	5.9
100,000	0.5	1.3	1.5	1.8	2.0	2.0	2.5	2.6	2.7	3.9	5.1

STORM STUDIES - ISOHYETAL MAP

Storm of April 13-19, 1941Assignment SW 2-19Study Prepared by: Tulsa, Okla. DistrictSouthwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 18-19 October 1908
 Assignment SW 2-23
 Location Colo., Kans. & Nebr.
 Study Prepared by:
 Southwestern Division
 Albuquerque District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 2/5/46
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/25/57
 Remarks:
 Center at May Valley, Colo.

DATA AND COMPUTATIONS COMPILED

GRID F-18

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " ")-----	15
Form 5001-D (" " " ")-----	14
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	41

PART II

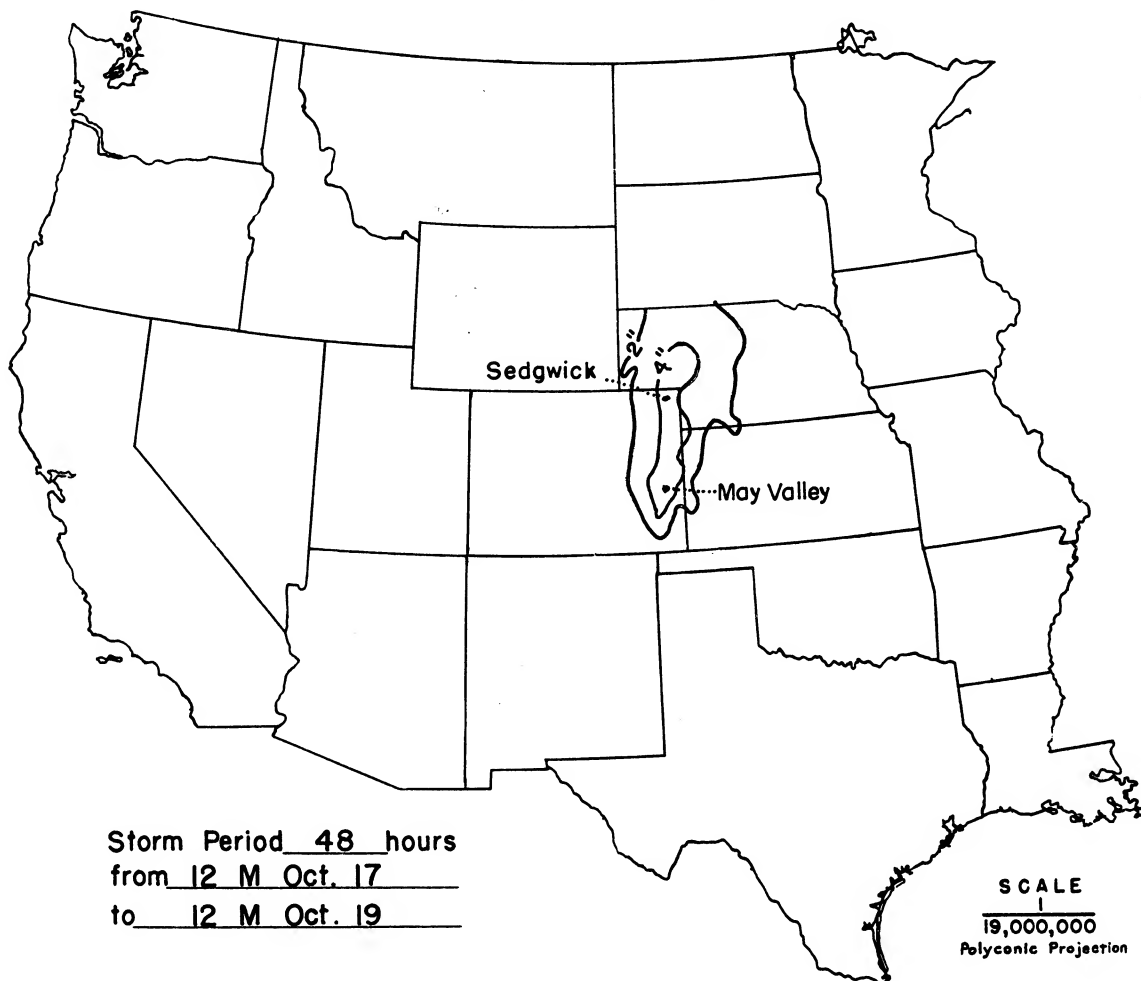
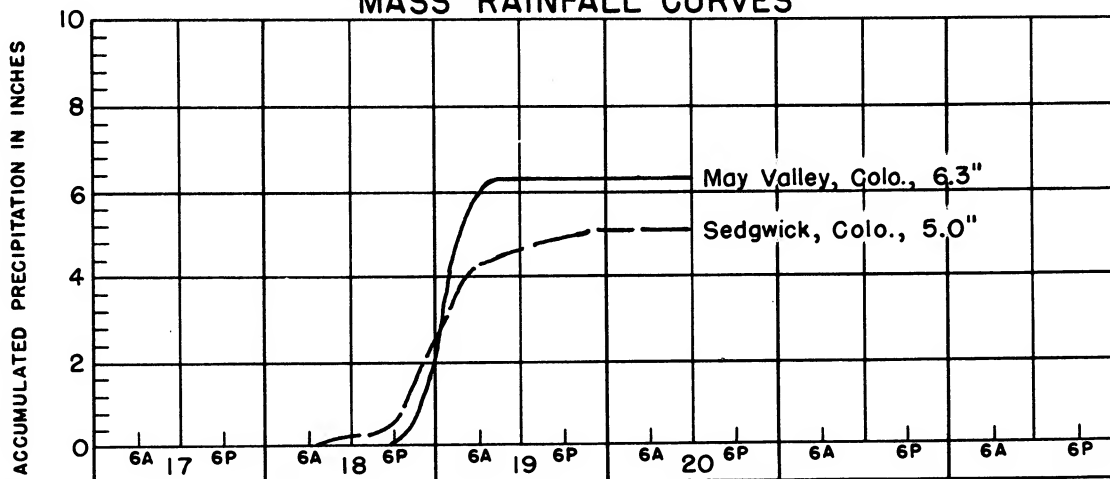
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

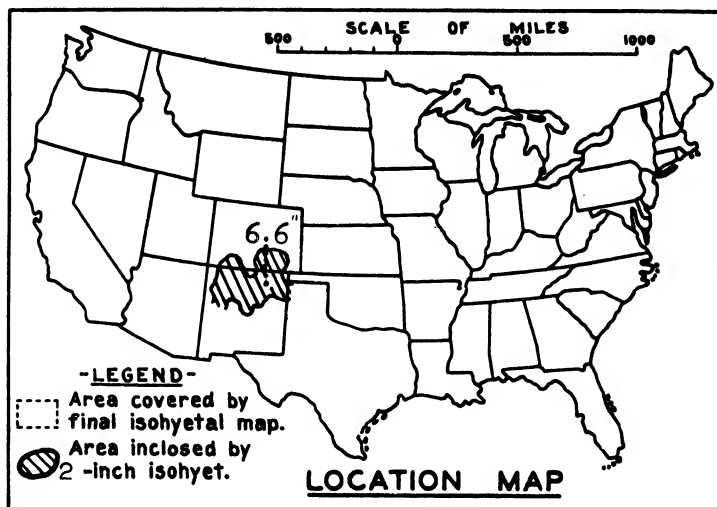
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	2
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	4.2	6.0	6.3	6.3	6.3	6.3	6.3					
100	4.1	5.9	6.3	6.3	6.3	6.3	6.3					
200	4.0	5.9	6.2	6.3	6.3	6.3	6.3					
500	3.8	5.6	6.1	6.2	6.2	6.2	6.2					
1000	3.5	5.4	5.8	5.9	5.9	5.9	5.9					
2000	3.2	5.0	5.5	5.6	5.6	5.6	5.6					
5000	2.7	4.5	5.1	5.2	5.2	5.3	5.3					
10000	2.4	4.0	4.6	4.7	4.8	4.9	4.9					
20000	2.1	3.4	4.0	4.2	4.3	4.4	4.4					
50000	1.4	2.3	3.1	3.3	3.4	3.5	3.6					
56000	1.3	2.2	3.0	3.2	3.3	3.4	3.4					

STORM STUDIES - ISOHYETAL MAPStorm of 18-19 October 1908Assignment SW 2-23Study Prepared by: Albuquerque, N.Mex., District
Southwestern DivisionStorm Period 48 hours
from 12 M Oct. 17
to 12 M Oct. 19SCALE
19,000,000
Polyconic Projection**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 6-11 August 1929

Assignment SW 2-27

Location N. Mex. - Colo.

Study Prepared by:

Southwestern Division

Albuquerque District

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10-3-46Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 8-10-61Remarks: Center near Valmora,
New Mexico

Grid G-19

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,250,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 1

Form 5001-B (24-hour " ")----- -

Form 5001-D (" " " ")----- 21

Miscl. precip. records, meteorological data, etc.----- -

Form 5002 (Mass rainfall curves)----- 21

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 3

Form S-11 (Depth-area data from isohyetal map)----- 1

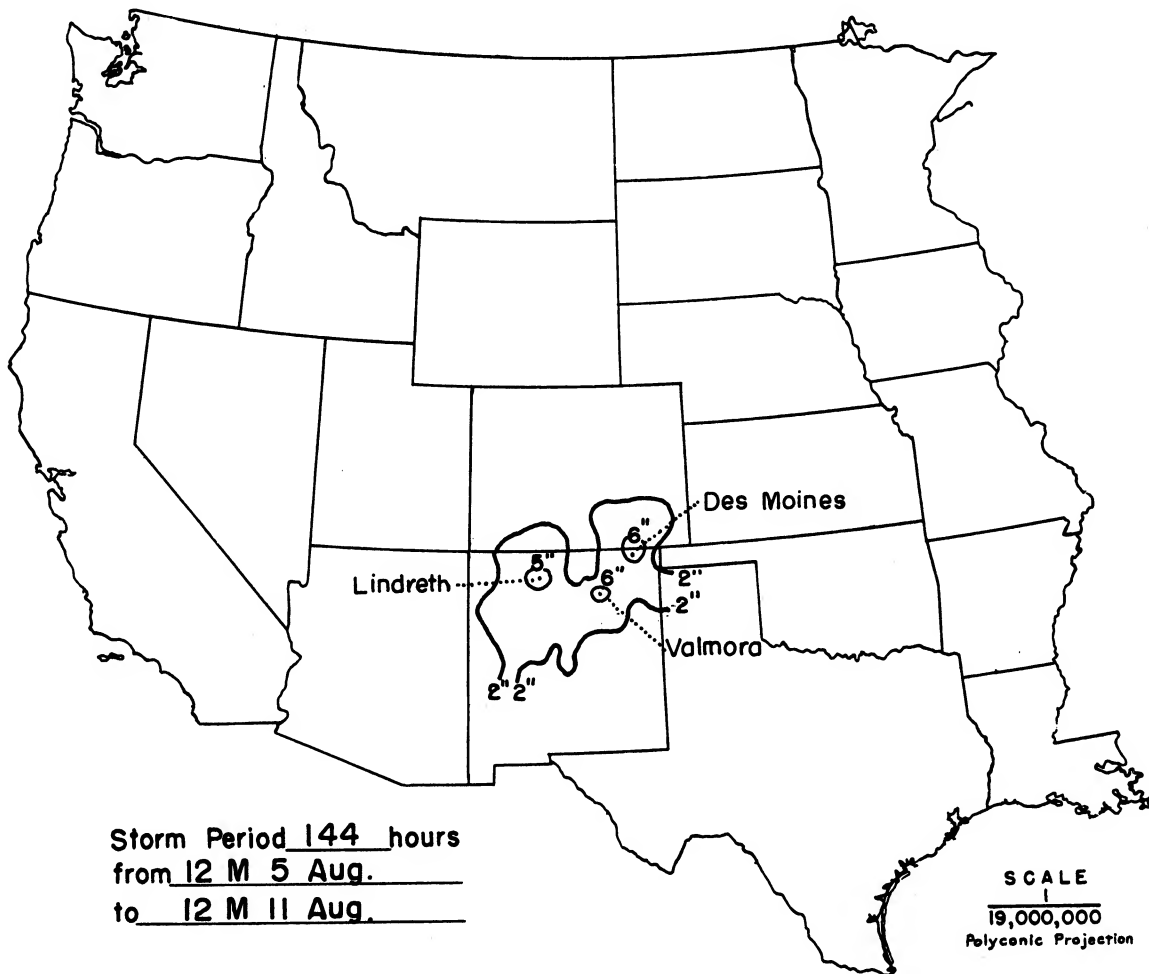
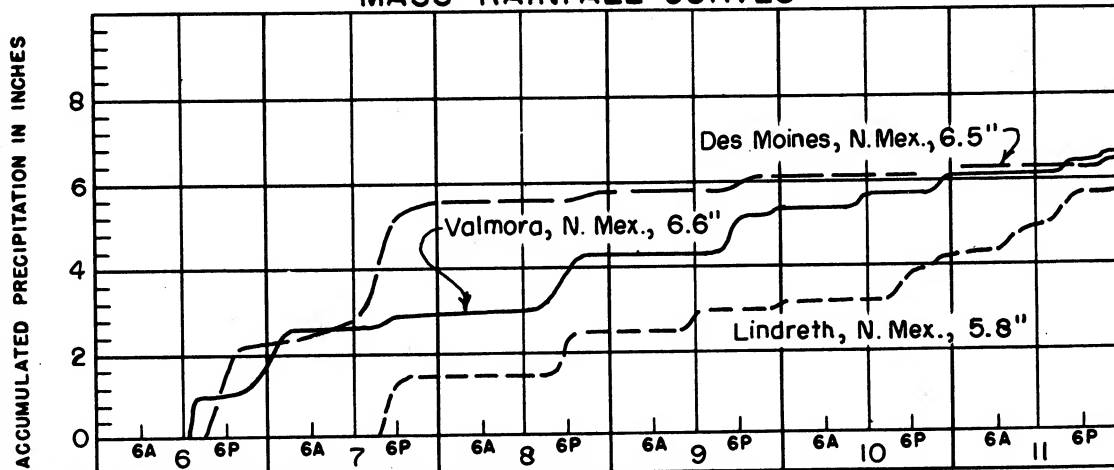
Form S-12 (Maximum depth-duration data)----- 6

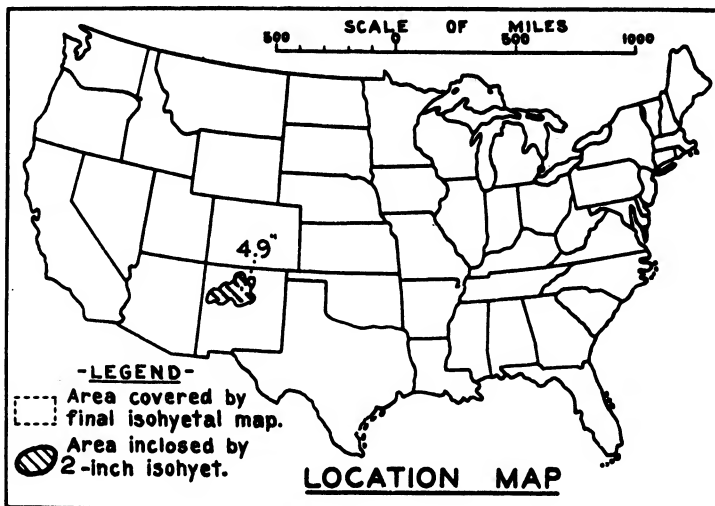
Maximum duration-depth-area curves----- 1

Data relating to periods of maximum rainfall----- 2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	36	48	60	72	96	120	144
10	3.1	3.5	3.5	4.6	5.6	5.6	5.8	5.8	6.1	6.3	6.6
100	2.8	3.2	3.4	4.1	5.6	5.6	5.8	5.8	6.1	6.3	6.5
200	2.7	3.1	3.3	3.9	5.5	5.5	5.8	5.8	6.0	6.2	6.4
500	2.5	2.9	3.2	3.7	5.4	5.4	5.7	5.7	6.0	6.2	6.4
1,000	2.3	2.7	3.0	3.4	5.3	5.4	5.5	5.6	5.8	6.0	6.2
2,000	2.0	2.5	2.8	3.2	4.9	5.0	5.1	5.2	5.4	5.5	5.8
5,000	1.5	2.1	2.4	2.7	3.9	4.1	4.2	4.3	4.5	4.6	4.9
10,000	1.0	1.6	1.8	2.0	2.6	3.0	3.2	3.3	3.5	3.7	4.0
20,000	0.6	0.9	1.1	1.4	1.8	2.0	2.2	2.3	2.6	3.0	3.3
49,000	0.4	0.6	0.7	0.9	1.1	1.3	1.5	1.6	2.1	2.8	3.1

STORM STUDIES - ISOHYETAL MAPStorm of 6-11 August 1929Assignment SW 2-27Study Prepared by: Albuquerque, N. Mex., District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 20-23 September 1929

Assignment SW 2-28

Location N. Mex.

Study Prepared by:
Southwestern Division
Albuquerque DistrictPart I Reviewed by H. M. Sec. of
Weather Bureau, 8/1/46Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/14/59Remarks: Center near Gallinas
Plant Station, N. Mex.

Grid G-20

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:250,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	1
Form 5001-B (24-hour " ")	-----	0
Form 5001-D (" " " ")	-----	13
Misc. precip. records, meteorological data, etc.	-----	4
Form 5002 (Mass rainfall curves)	-----	13

PART II

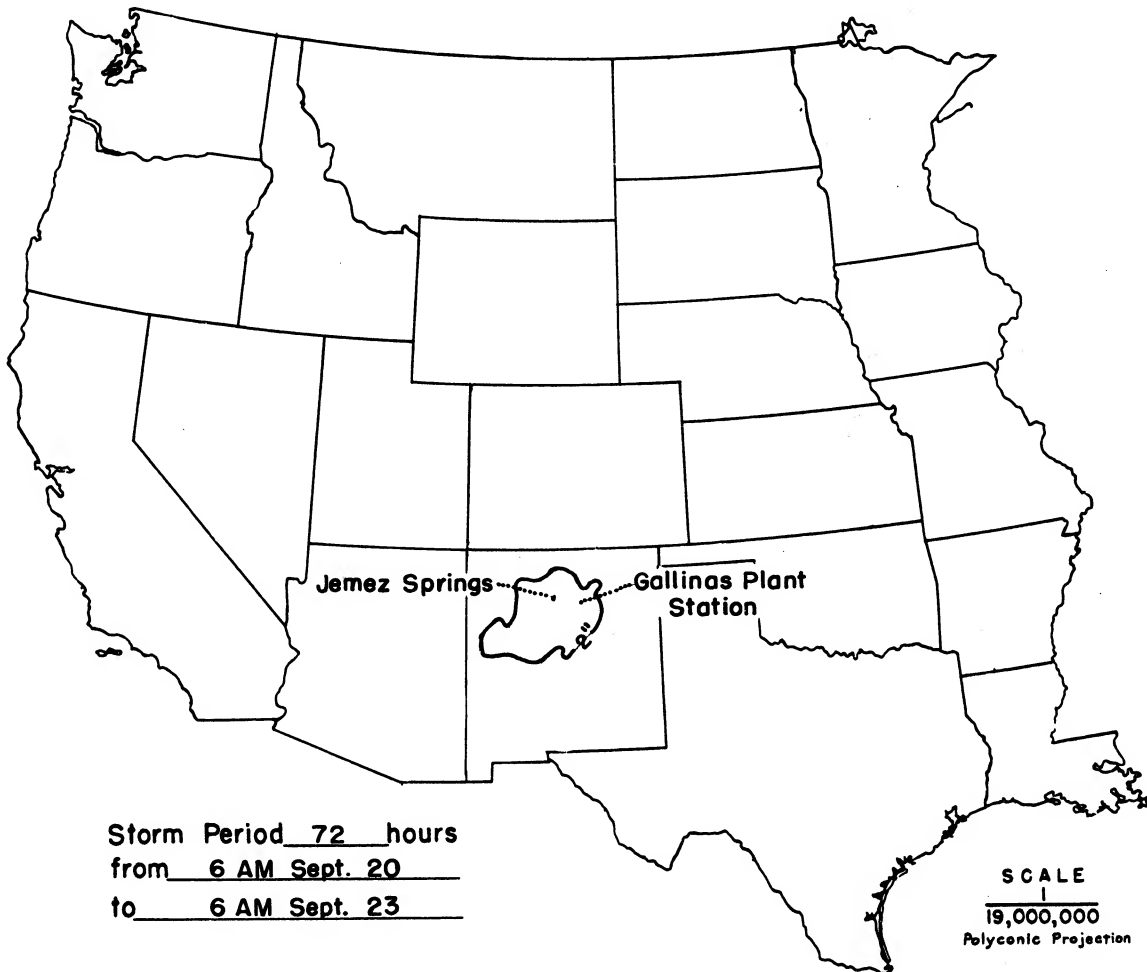
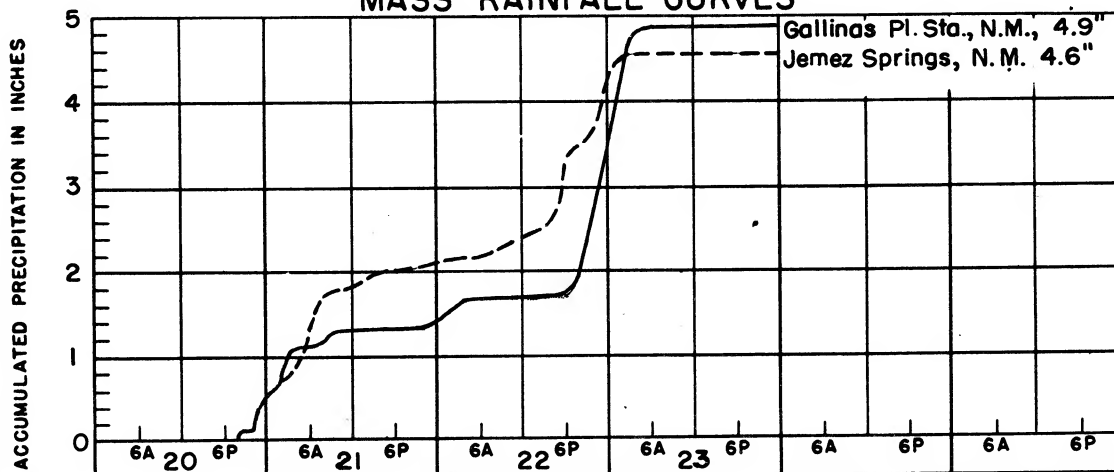
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

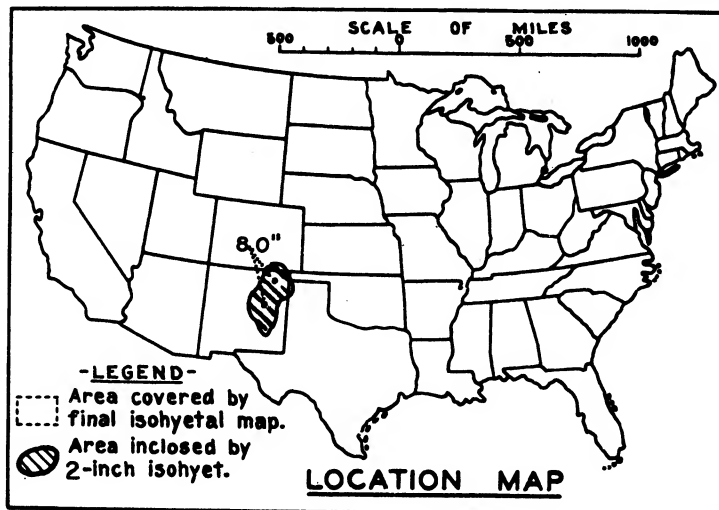
Form S-10 (Data from mass rainfall curves)	-----	1
Form S-11 (Depth-area data from isohyetal map)	-----	1
Form S-12 (Maximum depth-duration data)	-----	3
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	1

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
10	2.7	3.1	3.1	3.5	3.5	3.6	3.8	4.9	4.9	
100	2.3	2.8	2.9	3.1	3.2	3.4	3.8	4.8	4.8	
200	2.1	2.7	2.8	3.0	3.1	3.3	3.7	4.7	4.8	
500	1.8	2.4	2.7	2.8	2.9	3.1	3.7	4.6	4.6	
1,000	1.5	2.2	2.5	2.6	2.8	3.0	3.6	4.4	4.5	
2,000	1.1	1.9	2.3	2.4	2.6	2.8	3.4	4.2	4.3	
5,000	0.8	1.5	1.9	2.1	2.4	2.5	2.9	3.5	3.8	
10,000	0.7	1.2	1.6	1.8	2.0	2.2	2.4	3.0	3.4	
17,000	0.7	1.1	1.3	1.4	1.6	1.8	2.1	2.6	3.0	

STORM STUDIES - ISOHYETAL MAPStorm of 20-23 September 1929 Assignment SW 2-28Study Prepared by: Southwestern Division
Albuquerque District**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET



Storm of 29 Aug - 1 Sept 1942
 Assignment SW 2-29
 Location New Mex.; Colo.
 Study Prepared by:
 Southwestern Division
 Albuquerque District

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 9/9/49
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7/22/58
 Remarks: Center at Maxwell &
 Rancho Grande, New Mexico
 Dew pt. 74° Ret. pt. 250 SSE
 Grid G-19

DATA AND COMPUTATIONS COMPILED

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,300,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	46
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	45
Misc. precip. records, meteorological data, etc.-----	19
Form 5002 (Mass rainfall curves)-----	55

PART II

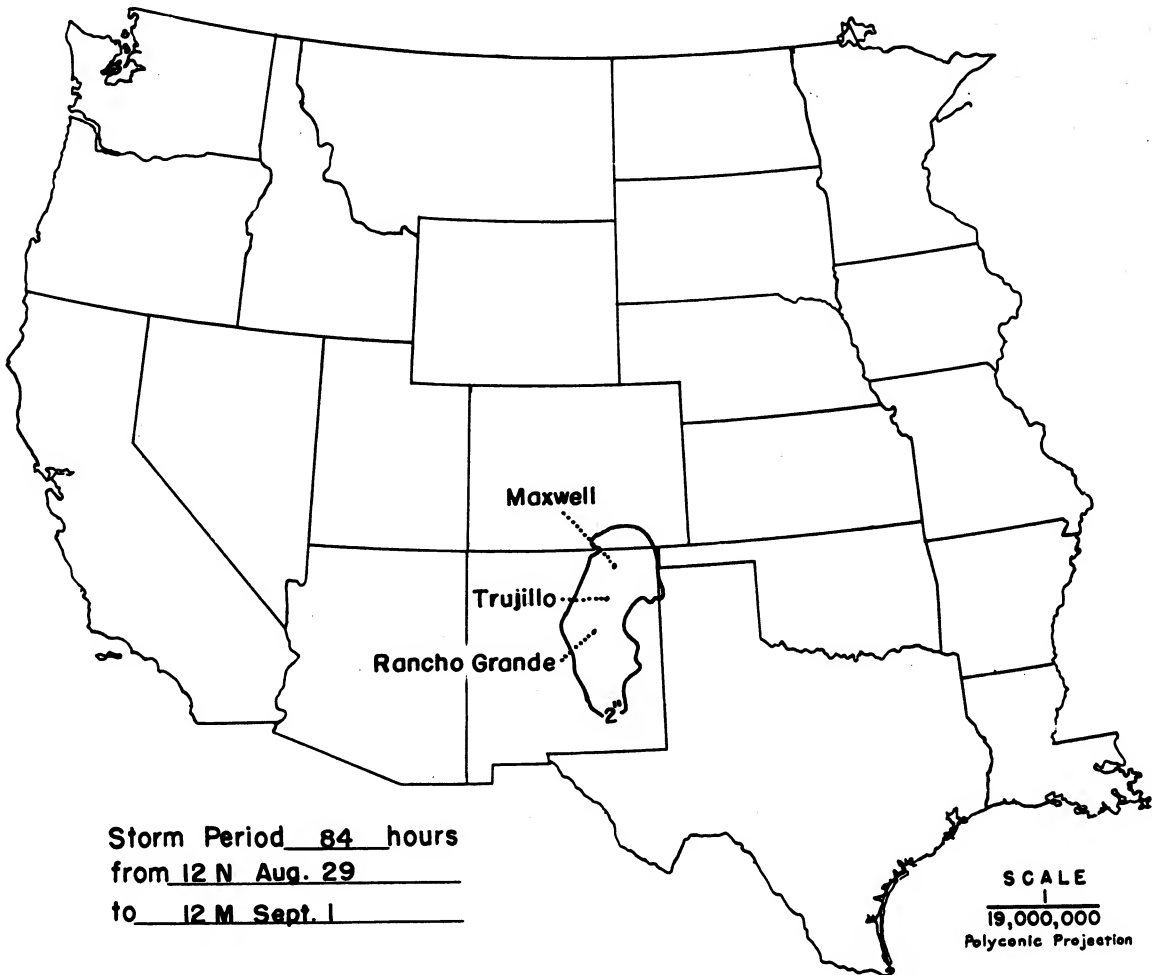
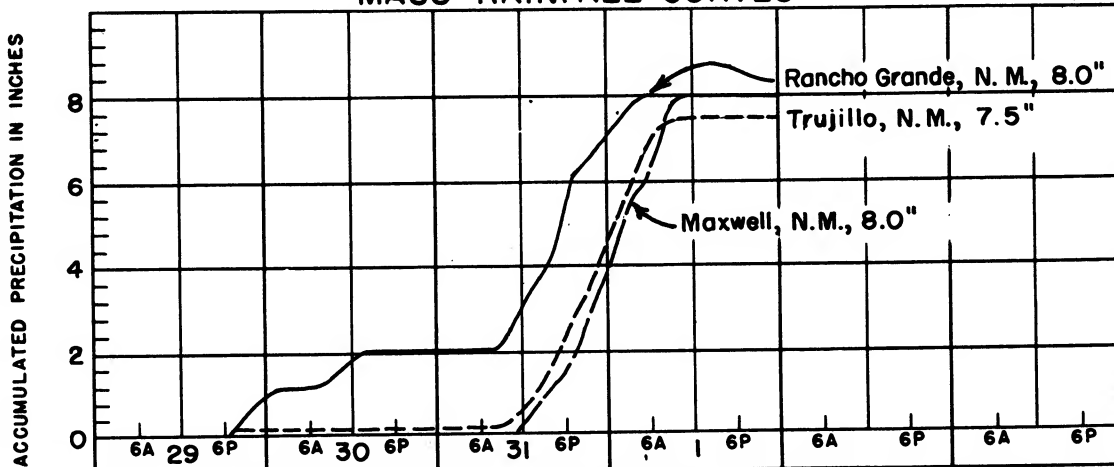
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

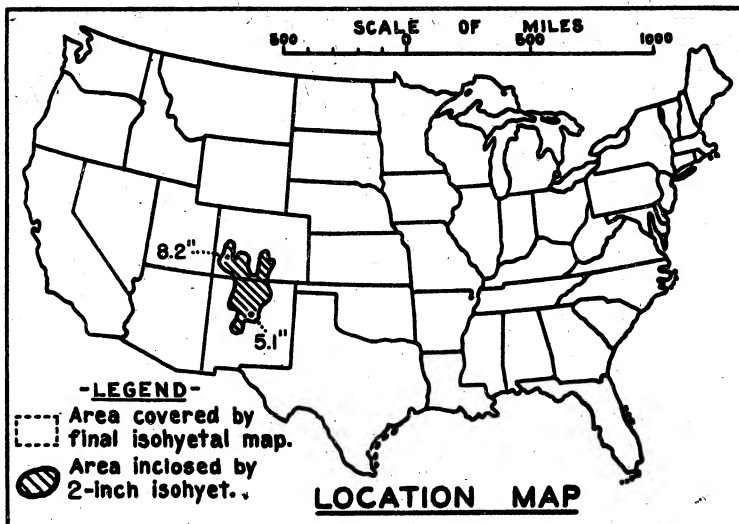
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	84
10	3.2	5.9	7.0	7.9	8.0	8.0	8.0	8.0	8.0	8.0
100	2.7	5.2	6.7	7.6	7.9	8.0	8.0	8.0	8.0	8.0
200	2.6	5.1	6.7	7.6	7.8	8.0	8.0	8.0	8.0	8.0
500	2.4	4.7	6.5	7.4	7.6	7.7	7.8	7.8	7.8	7.8
1000	2.3	4.2	6.1	6.8	7.1	7.2	7.2	7.2	7.2	7.3
2000	2.1	4.0	4.9	5.8	6.3	6.4	6.4	6.4	6.5	6.6
5000	1.9	3.6	4.5	5.5	5.8	6.0	6.0	6.0	6.1	6.3
10000	1.7	3.2	4.0	4.9	5.3	5.5	5.5	5.5	5.7	5.9
20,000	1.4	2.6	3.3	4.0	4.4	4.5	4.5	4.5	4.7	4.8
35,600	1.0	1.8	2.5	3.0	3.4	3.6	3.6	3.6	3.8	3.9

STORM STUDIES - ISOHYETAL MAPStorm of 29 Aug. - 1 Sept. 1942 Assignment SW 2-29Study Prepared by: Southwestern DivisionAlbuquerque, N. Mex., District**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 4-6 October 1911

Assignment SW 2-30

Location New Mexico & Colorado

Study Prepared by:

Southwestern Division

Albuquerque District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2/9/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 1/15/47Remarks: Centers at Gladstone,
Colo. and Harvey Upper Ranch,
N.M.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary Isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	5
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	13
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	13

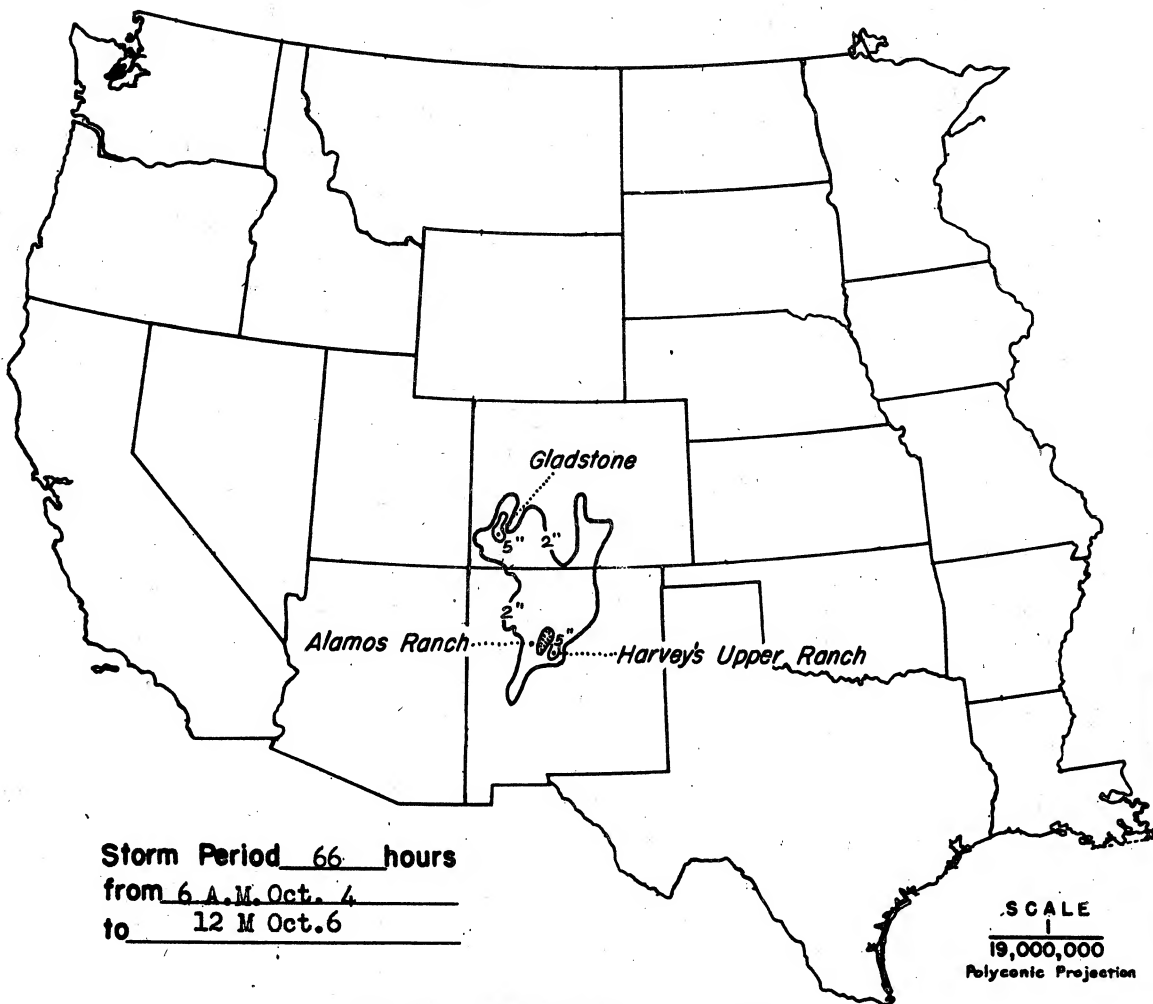
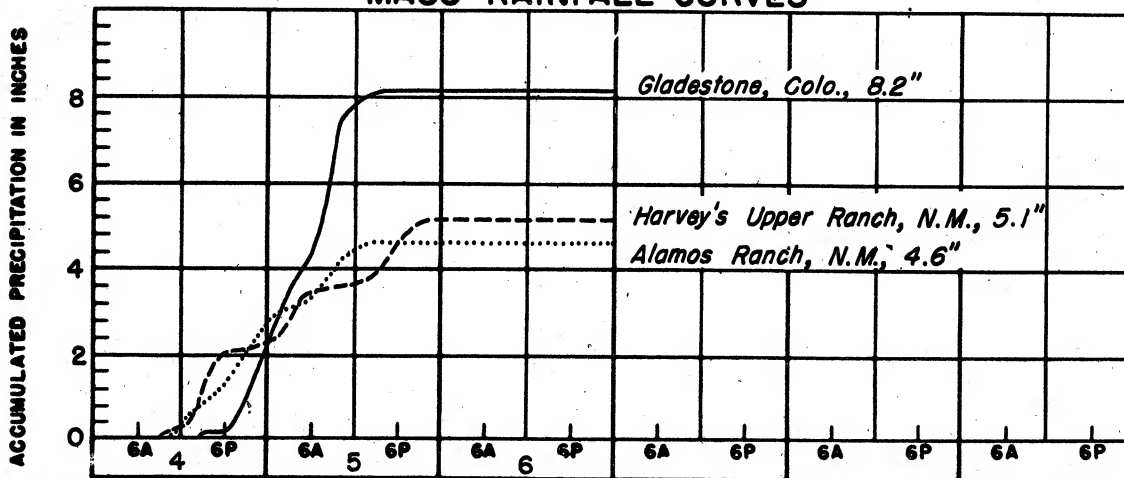
PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,293,000

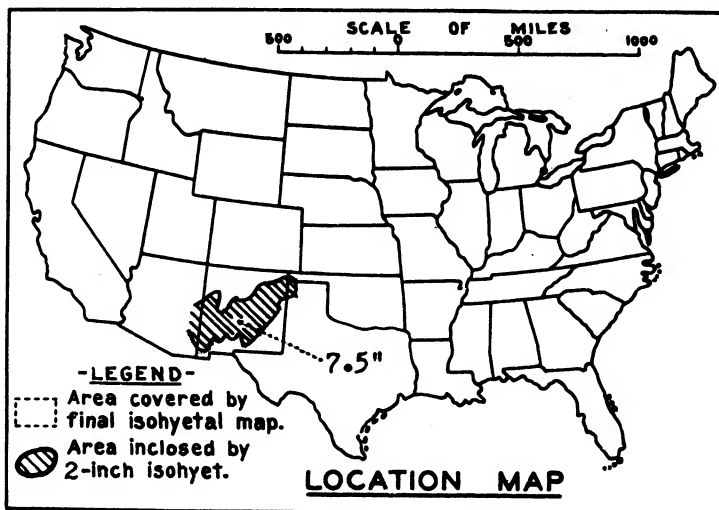
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	66		
10	3.7	6.1	7.6	8.1	8.2	8.2	8.2	8.2	8.2		
100	2.4	4.6	6.0	6.5	6.6	6.7	7.2	7.2	7.2		
200	2.1	4.2	5.5	6.0	6.1	6.2	6.7	6.7	6.7		
500	1.7	3.5	4.8	5.3	5.5	5.6	6.0	6.0	6.0		
1,000	1.5	3.0	4.3	4.8	5.0	5.1	5.4	5.4	5.4		
2,000	1.3	2.5	3.7	4.3	4.4	4.5	4.7	4.7	4.7		
5,000	1.1	1.9	2.9	3.5	3.7	3.8	3.9	3.9	3.9		
10,000	0.9	1.5	2.3	2.9	3.2	3.3	3.3	3.3	3.3		
20,000	0.7	1.4	2.0	2.5	2.8	2.9	3.0	3.0	3.0		

STORM STUDIES - ISOHYETAL MAPStorm of October 4-6, 1911Assignment SW 2-30Study Prepared by: Albuquerque, N. M. District
Southwestern DivisionStorm Period 66 hours
from 6 A.M. Oct. 4
to 12 M Oct. 6SCALE
19,000,000
Polyconic Projection**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 27-29 Sept. 1941
 Assignment SW 3-1
 Location New Mexico, Arizona
 Study Prepared by:
 Southwestern Division
 Albuquerque District

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/29/47
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/22/60
 Remarks: Center near
 Tularosa, New Mexico, Dewpt.
 69°, Ref. Pt. 375 SE
 Grid H-20

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,300,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	36
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	15
Misc. precip. records, meteorological data, etc.-----	8
Form 5002 (Mass rainfall curves)-----	47

PART II

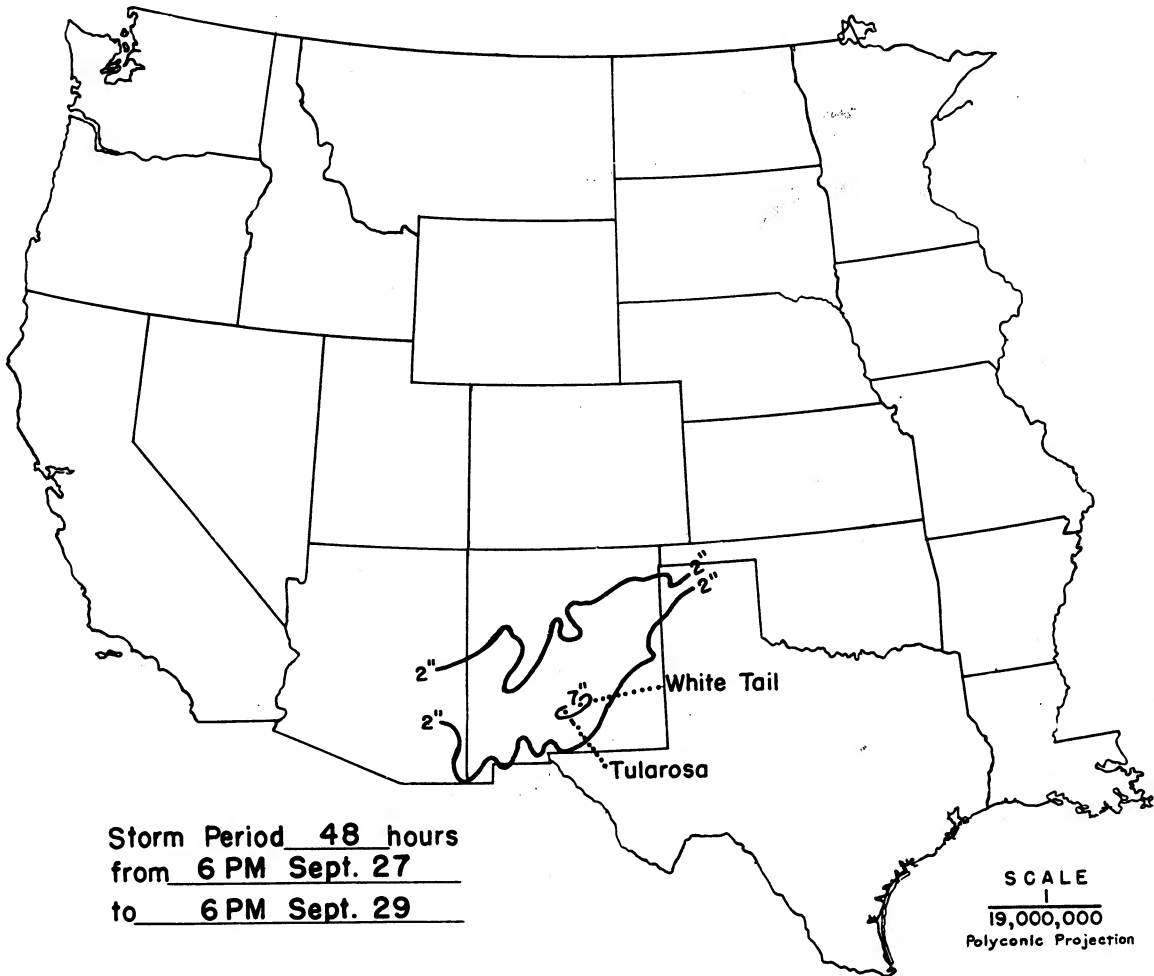
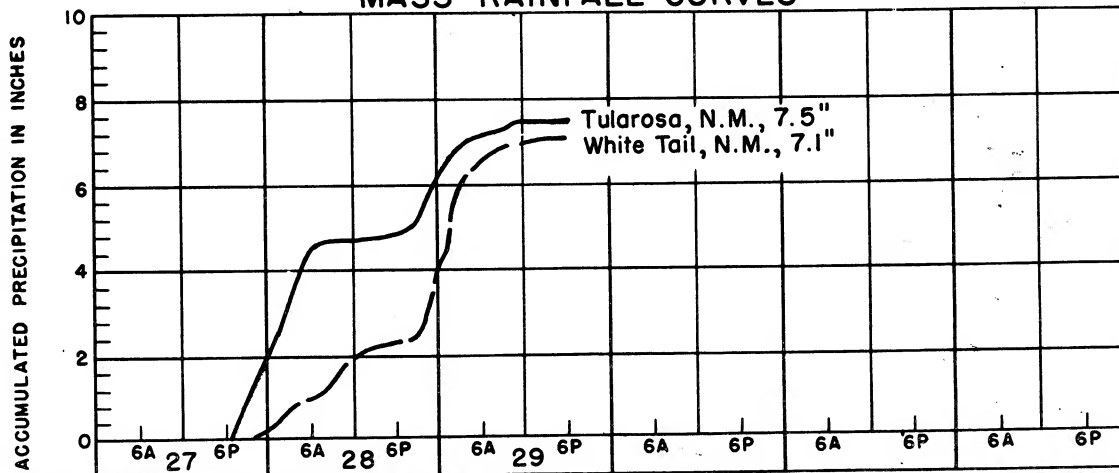
Final isohyetal maps, in 1 sheet, scale 1:1,300,000

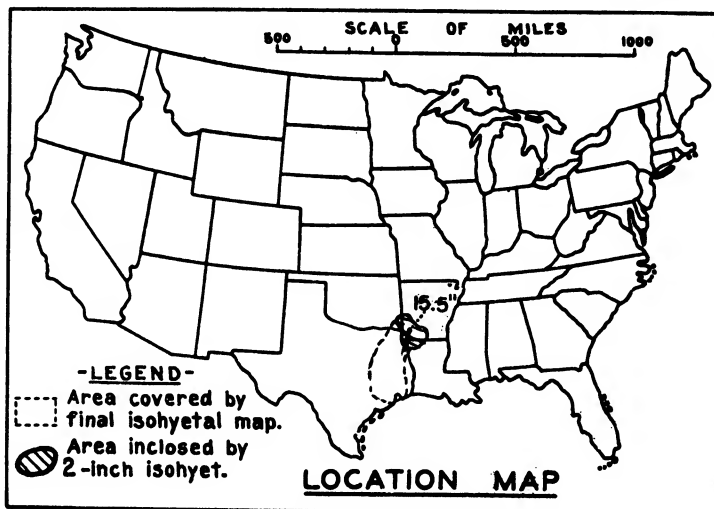
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	DURATION OF RAINFALL IN INCHES										
	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48				
10	3.7	4.8	4.9	5.7	6.8	7.3	7.5				
100	2.9	4.2	4.3	5.4	6.1	6.9	7.4				
200	2.7	4.0	4.1	5.2	5.9	6.7	7.2				
500	2.4	3.7	3.9	4.9	5.5	6.2	6.7				
1,000	2.1	3.4	3.7	4.5	5.2	5.8	6.2				
2,000	1.9	3.1	3.4	4.2	4.8	5.3	5.7				
5,000	1.5	2.5	3.0	3.6	4.2	4.6	5.0				
10,000	1.2	2.0	2.7	3.2	3.7	4.1	4.3				
20,000	0.9	1.7	2.3	2.7	3.1	3.4	3.6				
50,000	0.7	1.4	1.8	2.3	2.7	2.9	3.1				
66,700	0.7	1.3	1.7	2.2	2.7	2.9	3.0				

STORM STUDIES - ISOHYETAL MAPStorm of 27-29 September 1941 Assignment SW 3-1Study Prepared by: Albuquerque, N.M., District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 27-28 Aug 1947

Assignment SW 3-7A

Location Ark. and Okla.

Study Prepared by:

Southwestern Division

Tulsa District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/18/51Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4/17/57Remarks: Center at Wickes,
Arkansas Dewpoint 73°

Ref. Pt. 150 SW

DATA AND COMPUTATIONS COMPILED

GRID - H-14

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	-----	84
Form 5001-B (24-hour " ")	-----	-
Form 5001-D (" " " ")	-----	26
Misc. precip. records, meteorological data, etc.	-----	-
Form 5002 (Mass rainfall curves)	-----	60

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

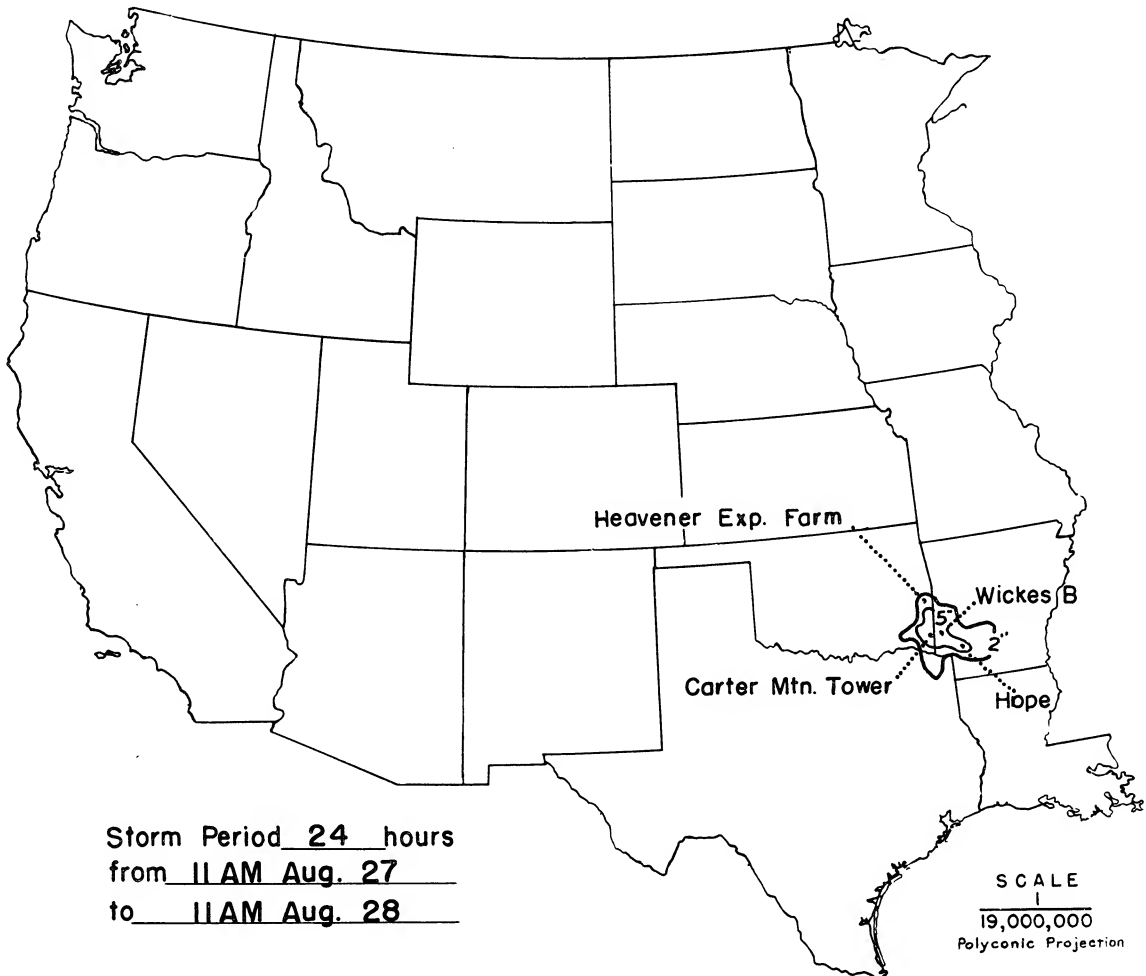
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)	-----	2
Form S-11 (Depth-area data from isohyetal map)	-----	1
Form S-12 (Maximum depth-duration data)	-----	3
Maximum duration-depth-area curves	-----	1
Data relating to periods of maximum rainfall	-----	1

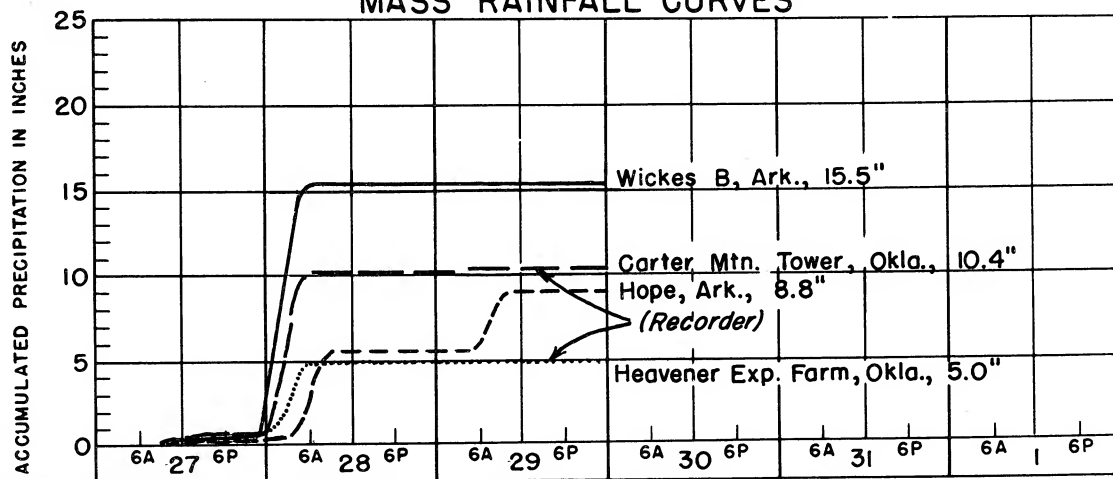
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

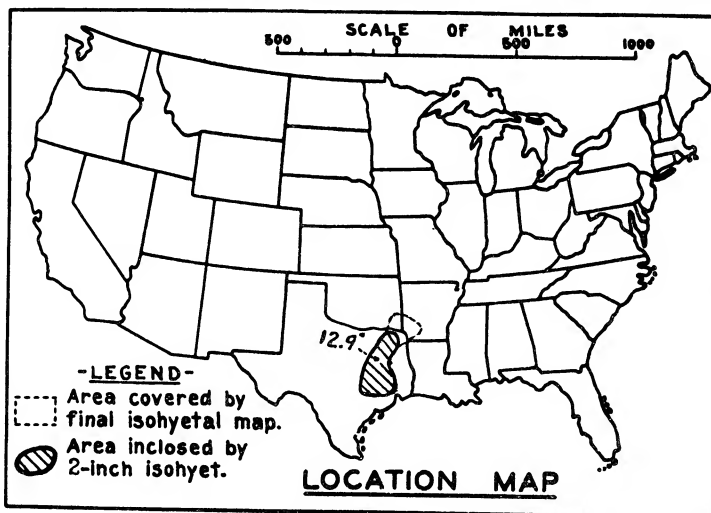
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24						
Max. Station	14.0	15.3	15.5	15.5						
10	13.8	14.9	15.2	15.3						
100	12.0	13.4	14.0	14.1						
200	11.2	12.8	13.4	13.6						
500	9.8	11.3	12.1	12.3						
1,000	8.3	9.6	10.3	10.5						
2,000	6.7	7.7	8.4	8.6						
5,000	4.2	4.9	5.6	5.7						
10,000	2.8	3.5	4.0	4.1						

STORM STUDIES - ISOHYETAL MAP

Storm of 27-28 August 1947 Assignment SW 3-7AStudy Prepared by: Southwestern Division
Tulsa, Okla., District

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 24-27 Aug 1947
 Assignment SW 3-7 B
 Location Eastern Texas
 Study Prepared by:
 Southwestern Division
 Tulsa District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 6/18/51
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 4/17/57
 Remarks: Center at Dallas,
 Tex.
 Dewpoint 76° Ref. Pt.
 215 SW

DATA AND COMPUTATIONS COMPILED**PART I**

GRID I -15

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	84
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	26
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	60

PART II

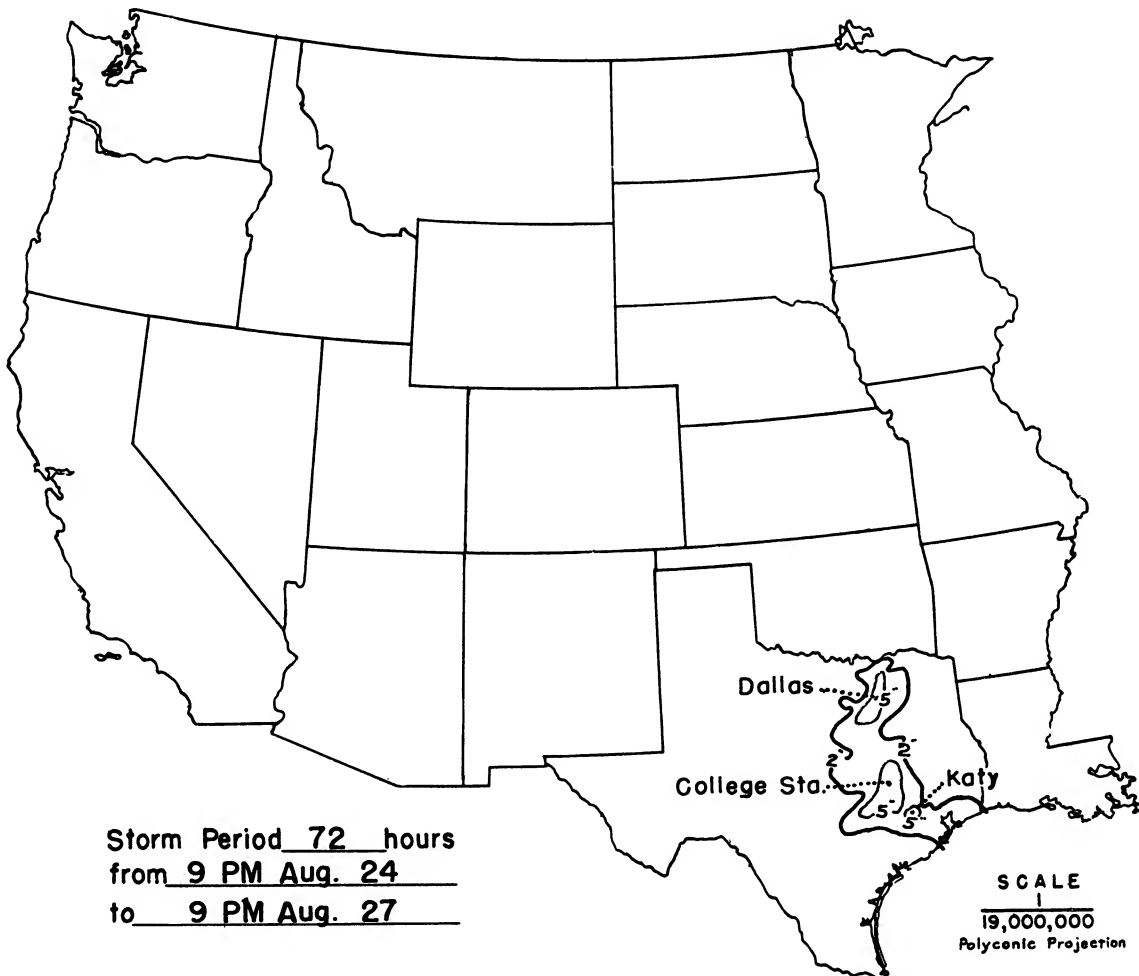
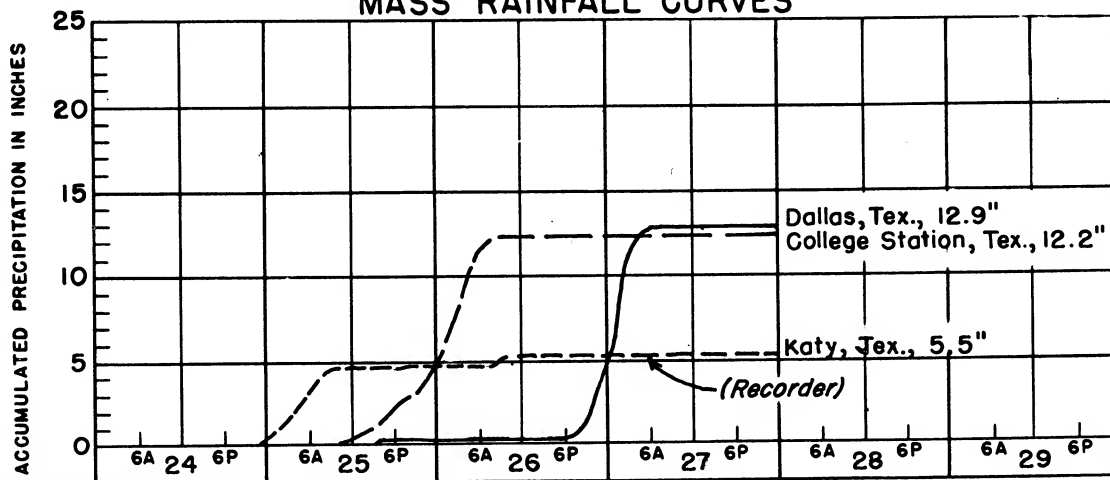
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

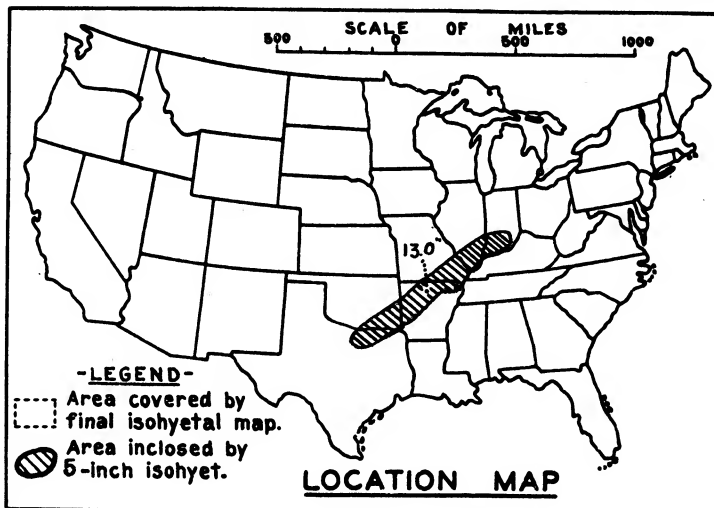
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	5
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	
Max. Station	11.1	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	
10	10.9	12.5	12.8	12.8	12.8	12.8	12.8	12.8	12.8	
100	9.9	11.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	
200	9.1	10.6	11.4	11.4	11.4	11.4	11.4	11.4	11.4	
500	7.3	8.7	9.7	10.2	10.4	10.5	10.5	10.5	10.5	
1,000	5.4	7.0	8.3	9.3	9.7	9.8	9.8	9.8	9.8	
2,000	4.2	6.0	7.0	8.4	8.7	8.8	8.8	8.8	8.8	
5,000	3.0	4.7	5.1	6.4	6.7	6.8	7.0	7.0	7.0	
10,000	2.2	3.7	4.1	4.8	5.0	5.2	5.6	5.6	5.6	
20,000	1.4	2.5	2.8	3.2	3.5	3.8	4.2	4.5	4.5	
30,000	1.0	1.7	1.9	2.3	2.8	3.0	3.4	3.9	4.0	

STORM STUDIES - ISOHYETAL MAPStorm of 24-27 August 1947 Assignment SW 3-7BStudy Prepared by: Southwestern Division
Tulsa, Okla., District**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 22-27 Jan 1949
 Assignment SW 3-10
 Location Tex., Ark., Mo., Ill., Ind.
 Study Prepared by:
 Southwestern Division
 Little Rock District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 7/11/52
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 5/2/57

Remarks:
 Center at Timbo, Ark.
 Dewpoint 65° Ref. Pt.
 250 S

DATA AND COMPUTATIONS COMPILED

Grid. G-13

PART I

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	214
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	137
Misc. precip. records, meteorological data, etc.-----	6
Form 5002 (Mass rainfall curves)-----	163

PART II

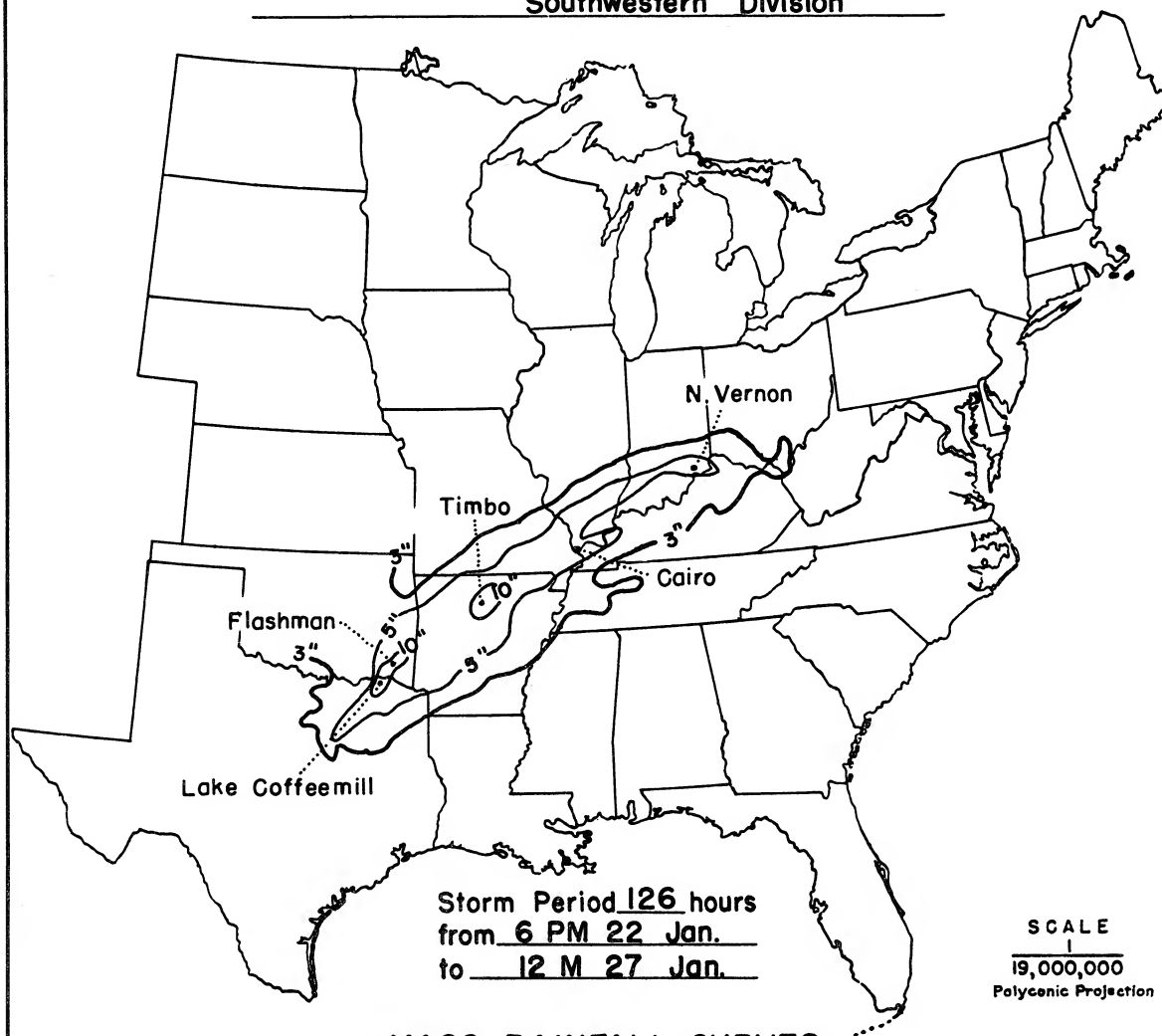
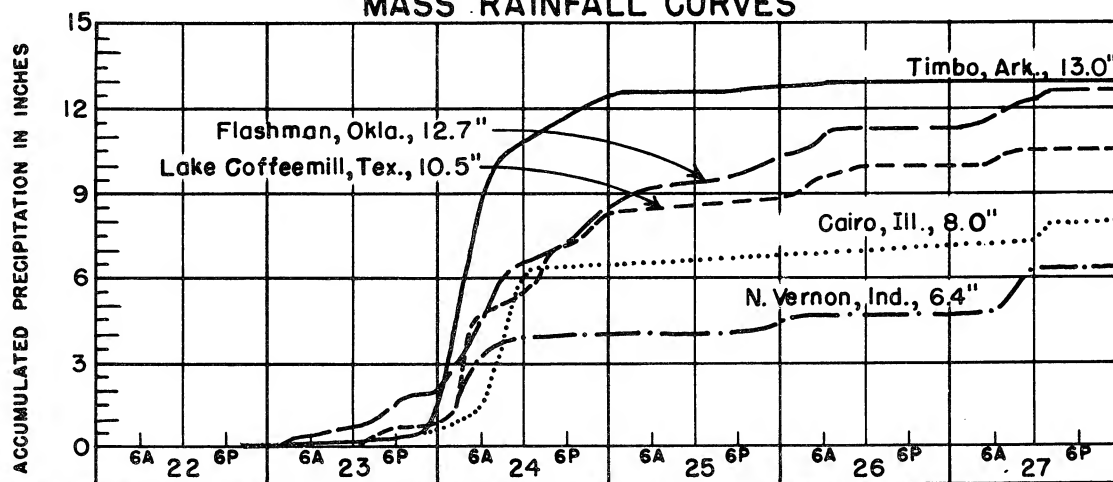
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

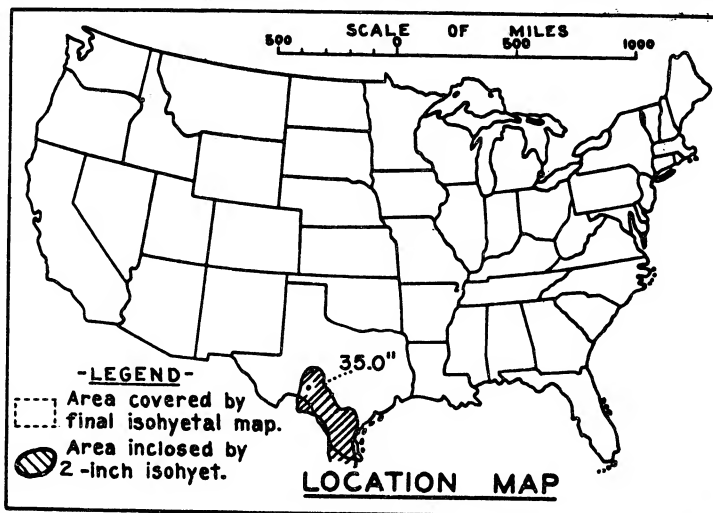
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	14
Form S-11 (Depth-area data from isohyetal map)-----	3
Form S-12 (Maximum depth-duration data)-----	17
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	126
10	7.5	10.0	11.0	11.7	12.2	12.3	12.5	12.7	12.8	13.0	13.0
100	6.1	8.6	9.3	10.6	11.2	11.4	11.6	11.7	11.9	12.1	12.3
200	5.9	8.3	9.4	10.0	10.6	10.8	11.0	11.2	11.3	11.6	11.8
500	5.5	7.7	8.6	9.2	9.7	9.9	10.0	10.3	10.4	10.9	11.2
1,000	4.9	6.8	7.7	8.2	8.6	8.9	9.2	9.4	9.7	10.3	10.9
2,000	4.1	5.7	6.4	7.0	7.6	8.0	8.4	8.7	9.0	9.8	10.4
5,000	3.2	4.6	5.4	6.2	6.9	7.5	7.9	8.3	8.6	9.4	9.9
10,000	2.9	4.3	5.0	5.9	6.6	7.1	7.4	7.8	8.3	9.1	9.3
20,000	2.5	4.0	4.6	5.2	5.7	6.2	6.5	6.9	7.4	8.3	8.6
50,000	1.7	3.3	3.8	4.2	4.6	4.9	5.2	5.6	6.1	6.9	7.3
97,000	1.3	2.4	2.9	3.2	3.5	3.7	4.0	4.3	4.7	5.6	6.0

STORM STUDIES - ISOHYETAL MAPStorm of 22-27 January 1949Assignment SW 3-10Study Prepared by: Little Rock, Ark., District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 23-28 June 1954

Assignment SW 3-22

Location Texas & Mexico

Study Prepared by:

Southwestern Division
Albuquerque DistrictPart I Reviewed by H. M. Sec. of
Weather Bureau, 3/1/55Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4/25/56Remarks: Center at Vic. Pierce
Texas. Dewpoint 75° - Ref. Pt.
250 SE Grid J-18**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:500,000

Precipitation data and mass curves:

	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	21
Form 5001-B (24-hour " ")-----	0
Form 5001-D (" " " ")-----	27
Misc. precip. records, meteorological data, etc.-----	
Form 5002 (Mass rainfall curves)-----	56

PART II

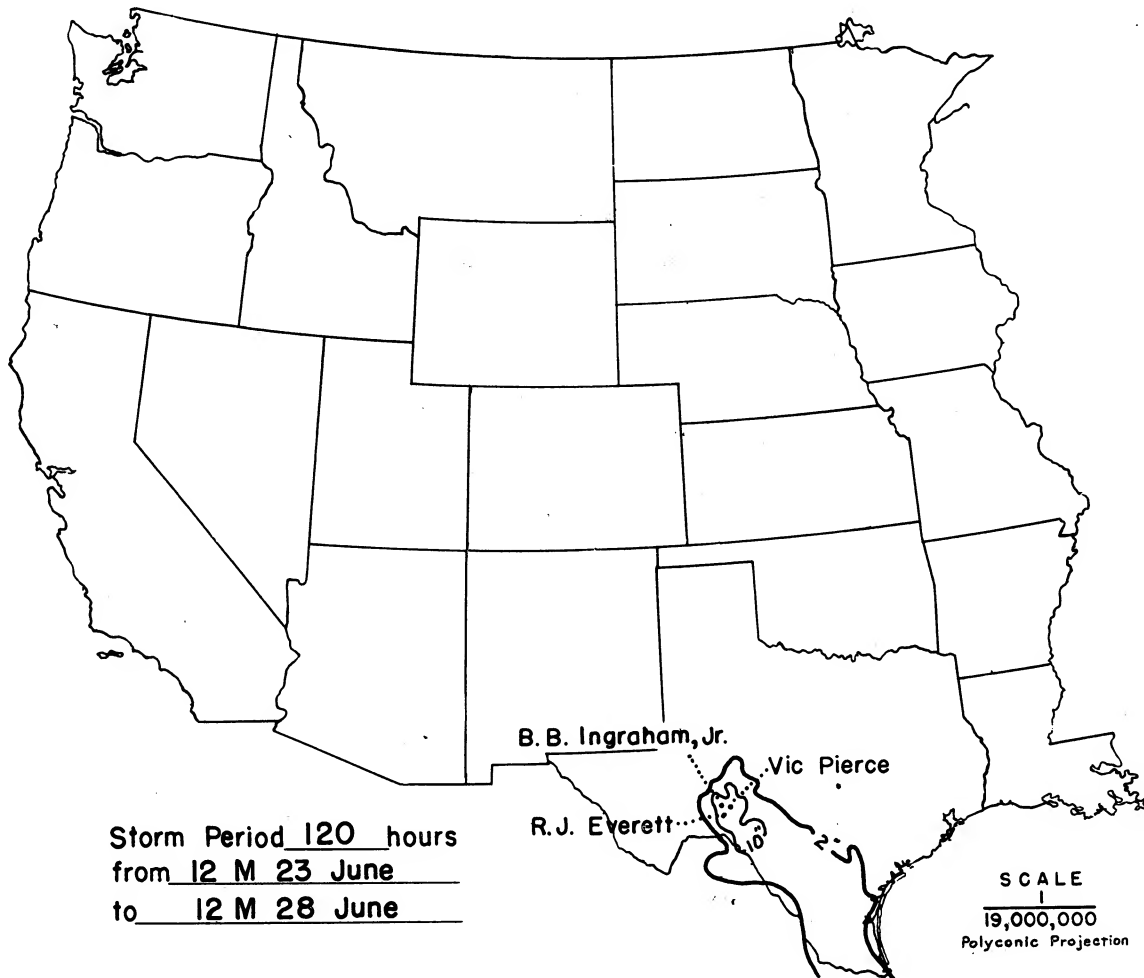
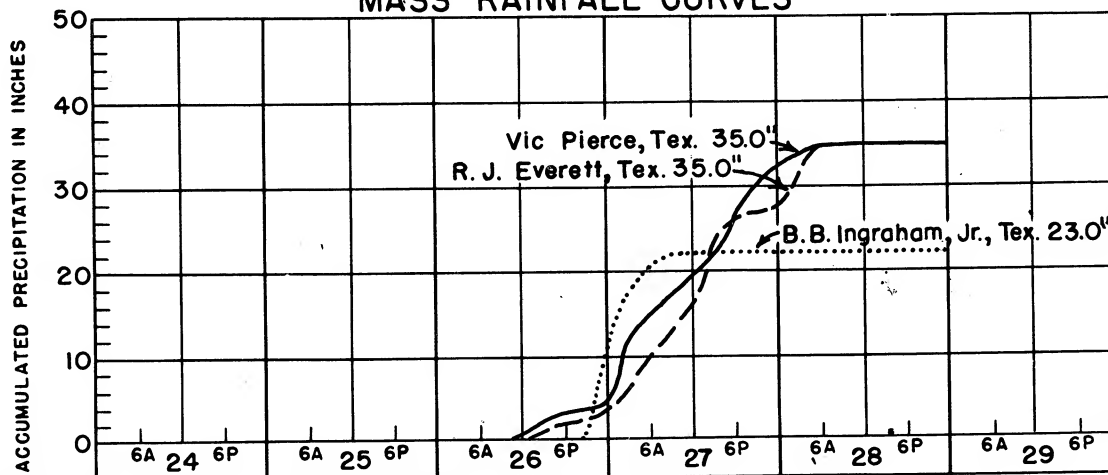
Final isohyetal maps, in 1 sheet, scale 1:500,000

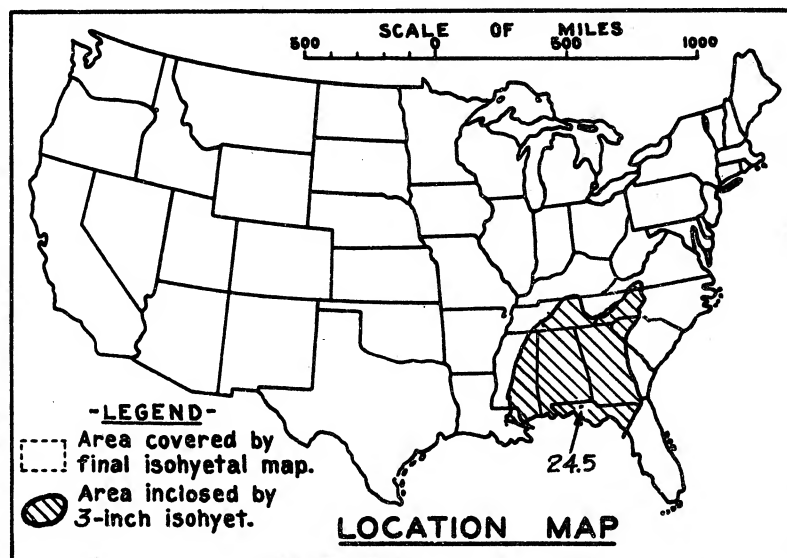
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	6
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	10
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
Max Station	17.5	22.2	23.8	29.2	30.8	32.0	35.0	35.0	35.0	35.0	35.0
10	16.0	20.1	22.5	26.7	30.7	32.0	34.6	34.6	34.6	34.6	34.6
100	12.6	16.5	19.7	23.6	27.6	29.2	31.5	31.5	31.5	31.5	31.5
200	10.9	14.9	18.6	22.5	25.9	27.5	29.5	29.5	29.5	29.5	29.5
500	8.4	12.0	16.6	20.5	23.0	24.5	26.3	26.3	26.3	26.3	26.3
1,000	6.6	9.7	14.6	18.4	20.1	21.5	23.0	23.0	23.0	23.0	23.0
2,000	4.8	7.5	11.8	14.7	16.1	17.6	19.4	19.4	19.4	19.4	19.4
5,000	2.8	4.9	7.4	8.9	10.4	11.9	13.7	14.3	14.3	14.3	14.3
10,000	1.7	3.2	4.7	5.7	7.1	8.0	9.8	10.4	10.5	10.5	10.5
20,000	1.2	2.0	2.8	3.6	4.5	5.2	6.5	7.0	7.2	7.2	7.2
27,900	1.0	1.6	2.3	2.9	3.6	4.1	5.2	5.7	5.8	5.8	5.8

STORM STUDIES - ISOHYETAL MAPStorm of 23-28 June 1954Assignment SW 3-22Study Prepared by: Albuquerque, N.Mex. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of July 5-10, 1916
 Assignment G M 1 - 19
 Location Southeastern States
 Study Prepared by:

South Atlantic Division
 Mobile District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 4-28-43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 7-27-45

Remarks: Centers at:
 Bonitoy, Fla., Lakesville,
 Miss., and Rockhouse No. 1
 N. C.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	16
Form 5001-B (24-hour " ")-----	71
Form 5001-D (" " " ")-----	0
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	71

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

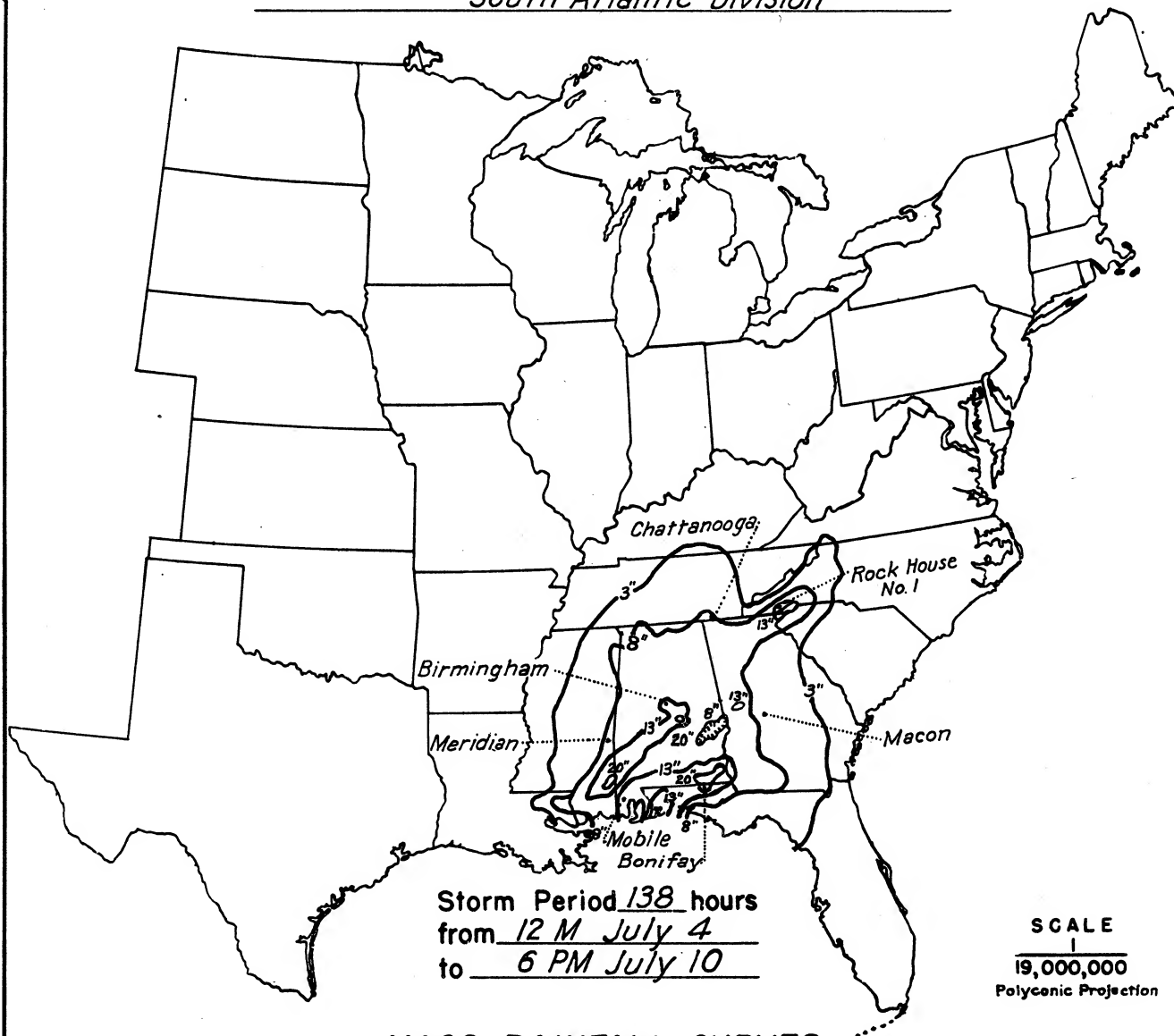
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	11
Form S-11 (Depth-area data from isohyetal map)-----	4
Form S-12 (Maximum depth-duration data)-----	17
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

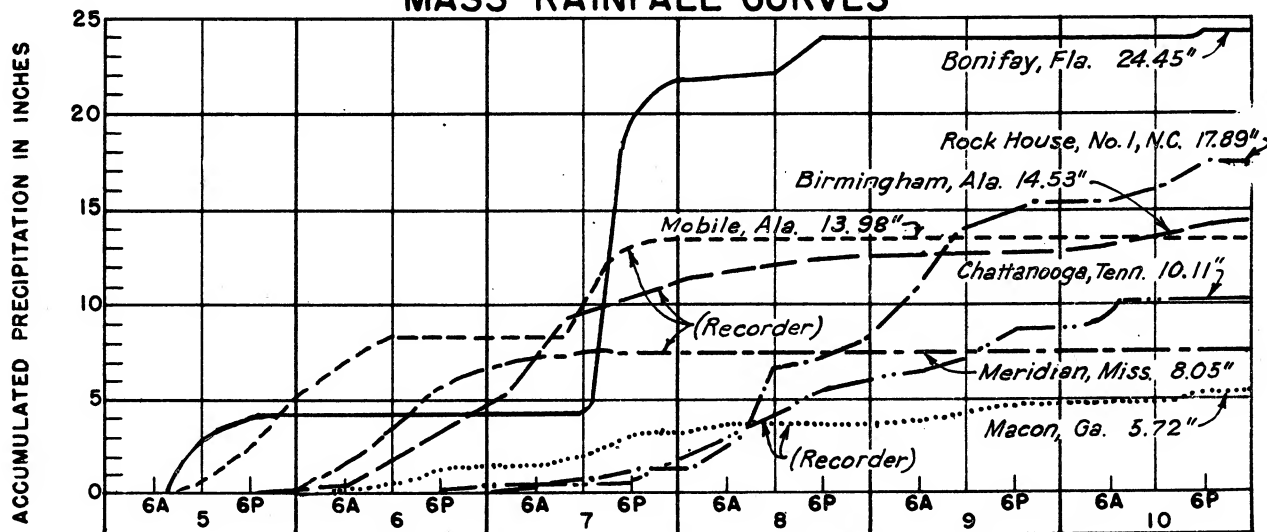
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

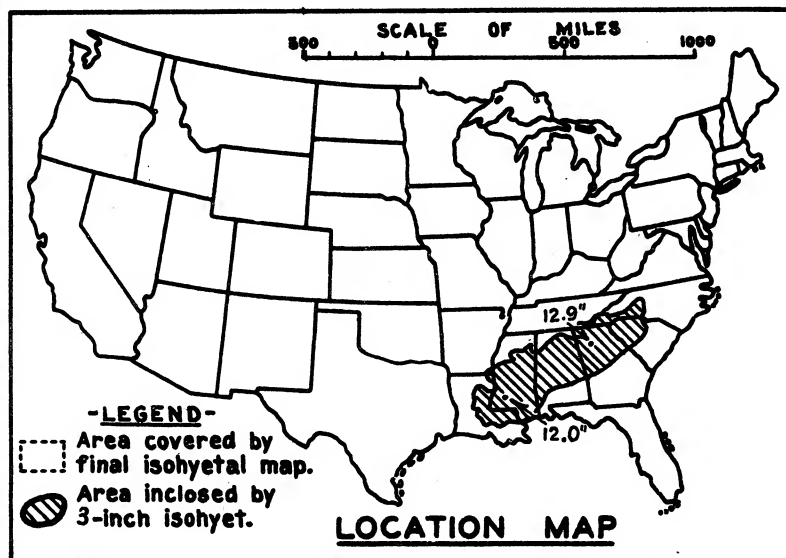
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	138
10	15.9	17.3	17.8	18.0	19.6	19.6	19.7	20.7	22.2	24.0	24.5
100	12.8	15.6	16.8	17.3	19.0	19.2	19.5	20.1	20.8	22.8	24.0
500	10.5	13.9	15.6	16.6	18.2	18.5	18.8	19.2	19.5	21.6	23.1
1,000	9.6	13.0	14.8	15.9	17.5	18.0	18.3	18.6	18.8	21.0	22.5
2,000	8.4	11.8	13.5	14.6	16.2	16.7	17.1	17.6	17.9	20.2	21.6
5,000	6.8	9.7	11.1	12.0	13.2	13.7	15.0	15.9	16.5	18.9	19.9
10,000	5.2	7.7	8.9	9.8	10.8	11.4	13.2	14.5	15.4	17.5	18.3
20,000	3.3	5.5	6.6	7.4	8.4	9.2	11.3	13.0	14.0	15.8	16.5
50,000	1.9	3.1	4.0	4.7	5.7	6.8	8.7	10.3	11.5	12.9	13.9
100,000	1.3	2.2	2.9	3.6	4.5	5.2	6.6	7.9	8.9	10.2	11.4
189,000	0.8	1.4	1.9	2.4	2.9	3.4	4.4	5.4	6.1	7.4	8.5

STORM STUDIES - ISOHYETAL MAP

Storm of July 5-10, 1916 Assignment GM 1-19Study Prepared by: Mobile, Ala. District
South Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of December 6 - 10, 1919

Assignment G M 1 - 22

Location Miss., Ala., & Ga.

Study Prepared by:

South Atlantic Division

Mobile District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 3/31/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 8/10/44Remarks: Centers at
Norcross, Ga., and
Brookhaven, Miss.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	14
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	16
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	41

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

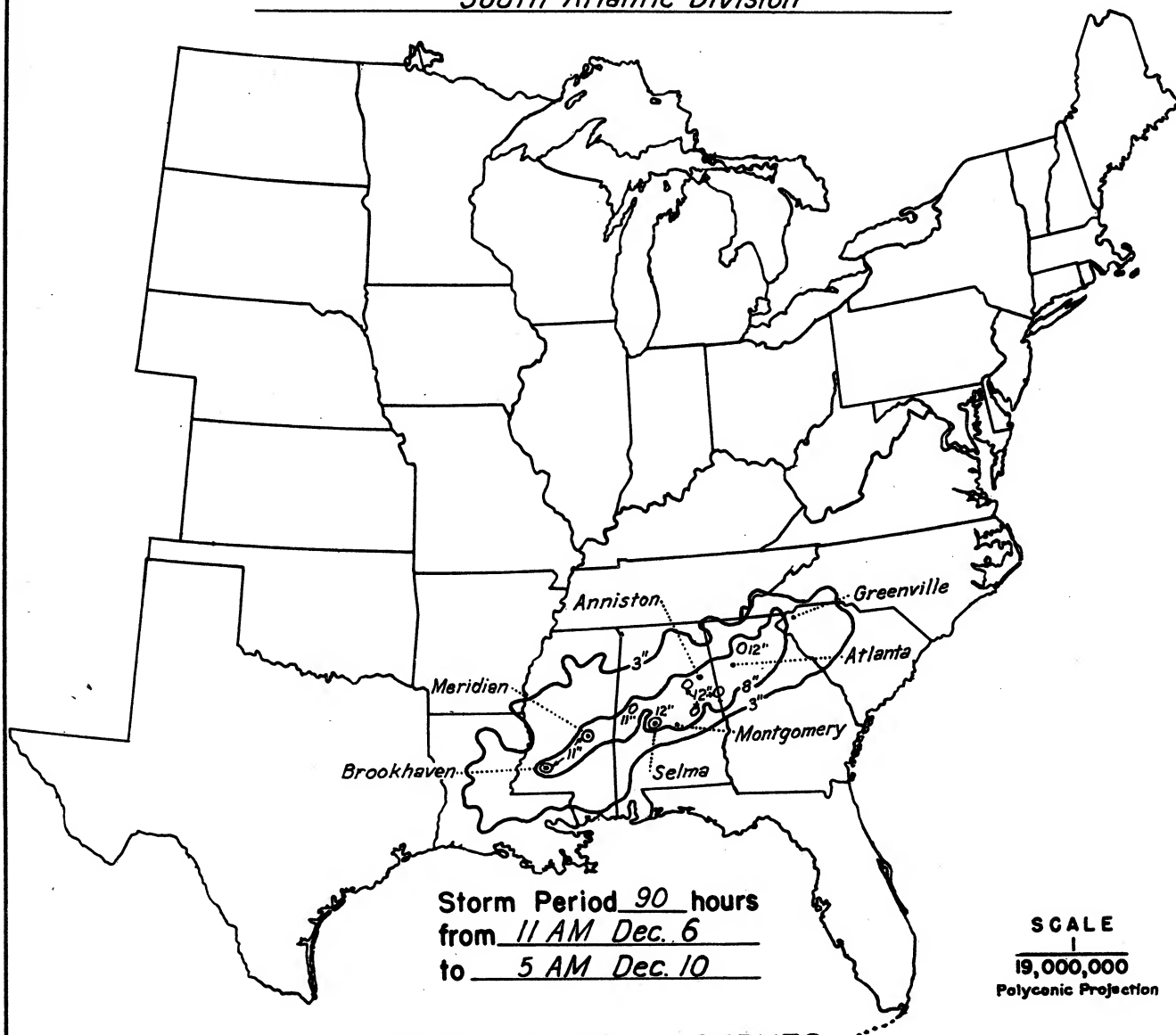
Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	8
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

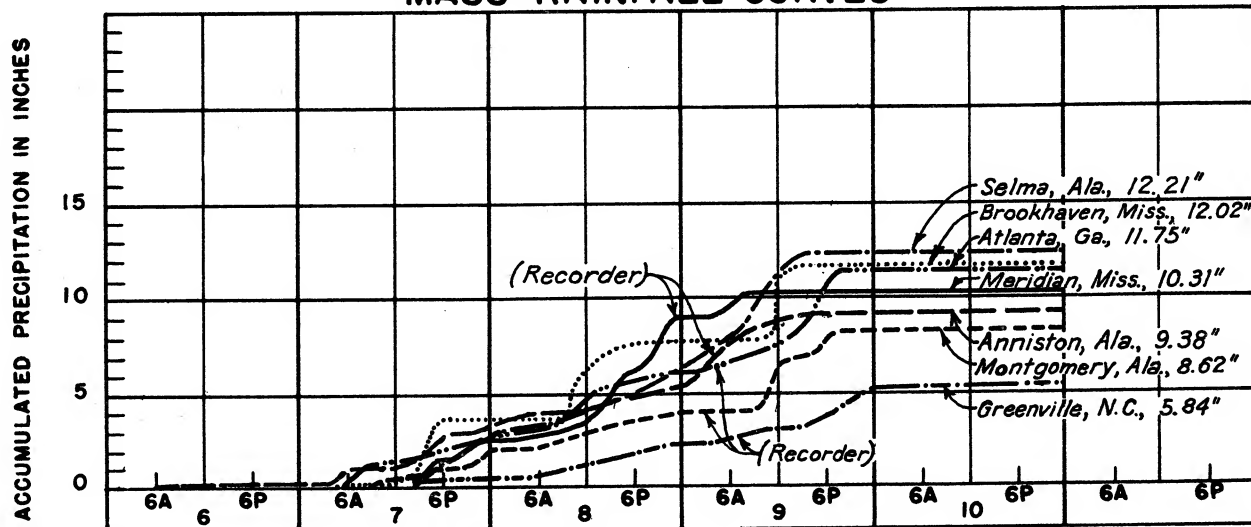
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	90
10	5.8	7.8	8.2	8.6	10.3	11.2	11.6	12.2	12.9	12.9
100	5.1	7.5	8.1	8.4	10.0	10.8	11.5	11.9	12.4	12.6
200	4.8	7.4	8.0	8.3	9.8	10.6	11.4	11.7	12.2	12.5
500	4.4	6.9	7.6	8.0	9.5	10.2	11.2	11.5	11.9	12.2
1,000	3.9	6.3	7.1	7.5	9.0	9.7	10.9	11.2	11.7	12.0
2,000	3.5	5.7	6.5	7.0	8.4	9.1	10.3	10.9	11.4	11.7
5,000	2.9	4.7	5.5	6.2	7.5	8.3	9.4	10.3	10.9	11.2
10,000	2.5	4.0	4.8	5.6	6.8	7.5	8.7	9.8	10.5	10.8
20,000	2.0	3.3	4.0	4.9	6.0	6.7	7.9	9.1	9.9	10.1
50,000	1.4	2.3	3.0	3.8	4.7	5.4	6.6	7.7	8.3	8.5
100,000	0.9	1.5	2.1	2.7	3.3	3.9	5.0	5.7	6.2	6.4
116,000	0.8	1.4	1.9	2.4	3.0	3.5	4.5	5.2	5.8	6.0

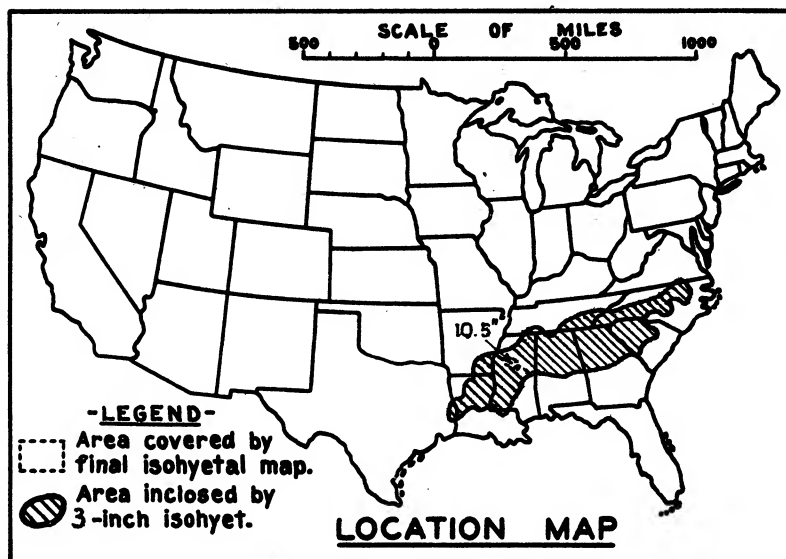
STORM STUDIES - ISOHYETAL MAP

Storm of December 6-10, 1919 Assignment GM 1-22
Study Prepared by: Mobile, Ala. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of December 8-11, 1932

Assignment G M 2 - 11

Location La., Miss., Ala., Ga.

Study Prepared by:

South Atlantic Division

Mobile District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 5-4-43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9-24-45

Remarks: Center At:

Edinburg, Miss.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " " " ")-----	51
Form 5001-D (" " " " ")-----	1
Miscl. precip. records, meteorological data, etc.-----	0
Form 5002 (Mass rainfall curves)-----	53

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

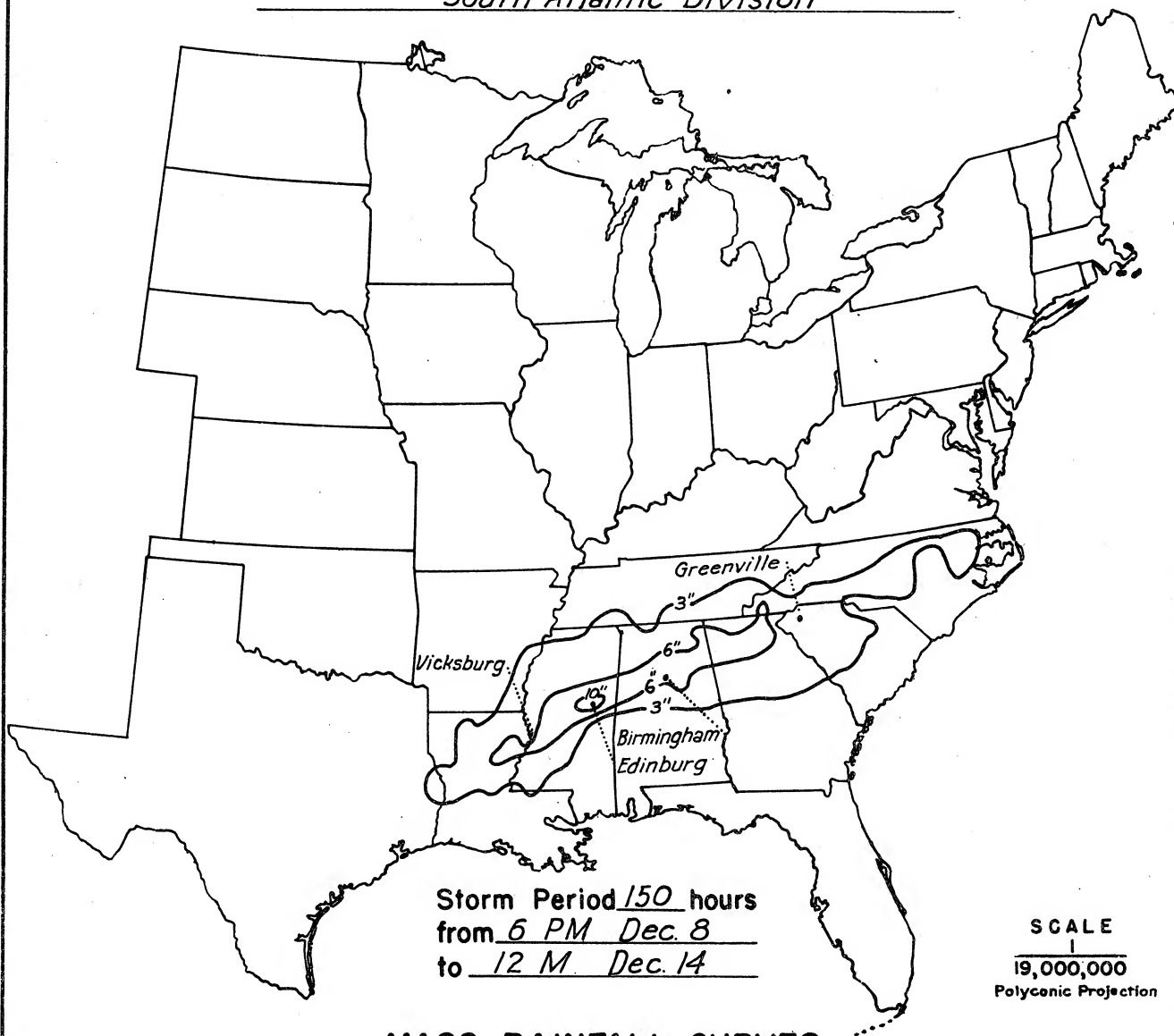
Form S-10 (Data from mass rainfall curves)-----	8
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

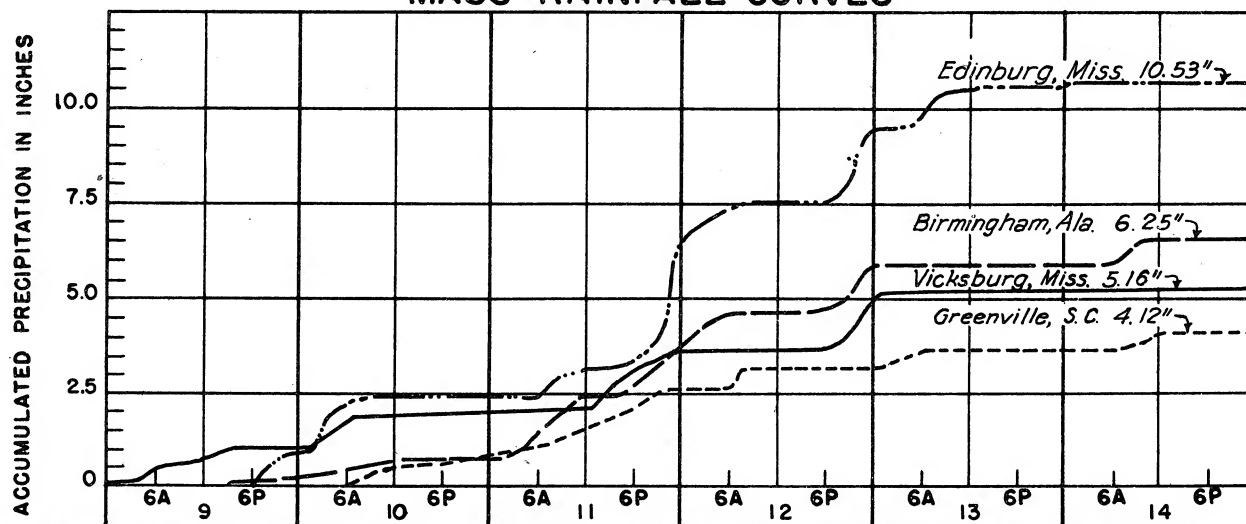
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	150
10	2.6	4.0	4.4	4.7	6.2	6.8	7.5	8.0	9.5	10.3	10.5
100	2.3	3.9	4.3	4.5	6.0	6.6	7.3	7.8	9.1	10.1	10.3
200	2.2	3.9	4.2	4.4	5.9	6.4	7.1	7.6	8.9	9.9	10.2
500	2.1	3.7	4.0	4.2	5.7	6.1	6.9	7.4	8.6	9.6	10.0
1,000	2.0	3.5	3.8	4.0	5.4	5.8	6.6	7.1	8.3	9.3	9.7
2,000	1.9	3.1	3.6	3.8	4.9	5.3	6.2	6.8	7.7	8.8	9.1
5,000	1.8	2.6	3.2	3.4	4.3	4.7	5.6	6.1	7.0	7.8	8.4
10,000	1.7	2.3	2.9	3.1	3.8	4.2	5.0	5.6	6.4	7.1	7.7
20,000	1.6	1.9	2.5	2.8	3.3	3.6	4.4	5.0	5.8	6.4	7.1
50,000	1.2	1.4	1.9	2.2	2.6	2.9	3.5	4.2	4.7	5.4	6.1
100,000	0.8	1.1	1.2	1.6	2.0	2.1	2.8	3.4	3.7	4.3	5.2
113,000	0.7	1.0	1.1	1.4	1.8	1.9	2.6	3.1	3.5	4.0	4.9

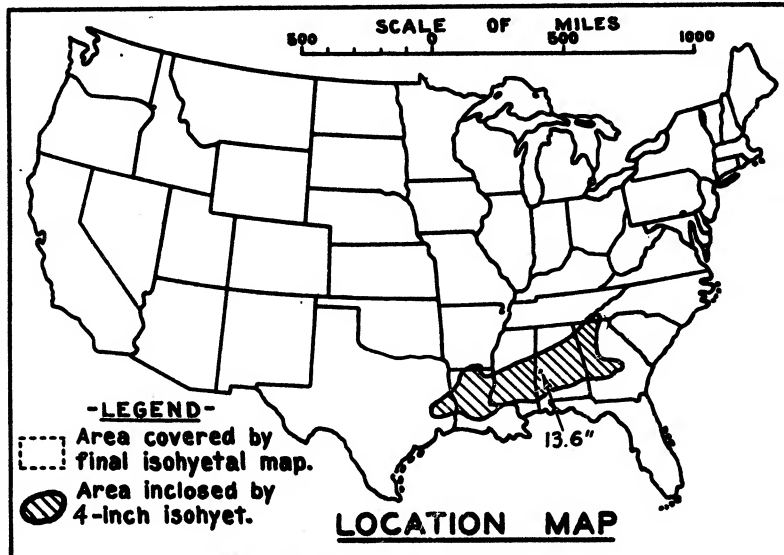
STORM STUDIES - ISOHYETAL MAP

Storm of December 8-14, 1932 Assignment GM 2-11
Study Prepared by: Mobile, Ala. District
South Atlantic Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of April 5 - 9, 1938
 Assignment G M 2 - 25
 Location Cent. Ala., Miss., and La.
 Study Prepared by: South Atlantic Division
 Mobile District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 8/21/41
 Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 7/4/44
 Remarks: Center at :
 Look No. 2, Ala.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	58
Form 5001-B (24-hour " ")-----	93
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	93

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

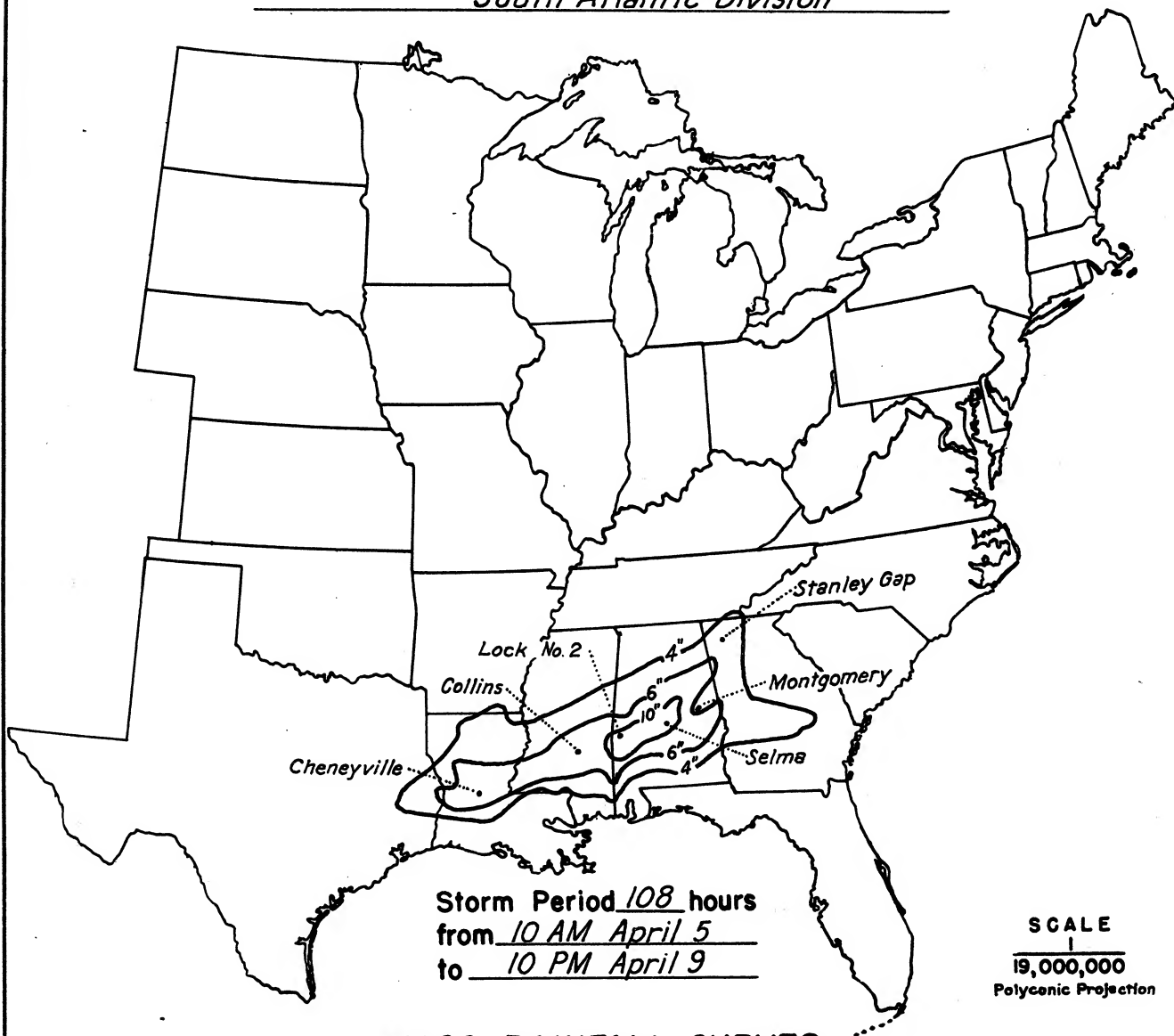
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	10
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

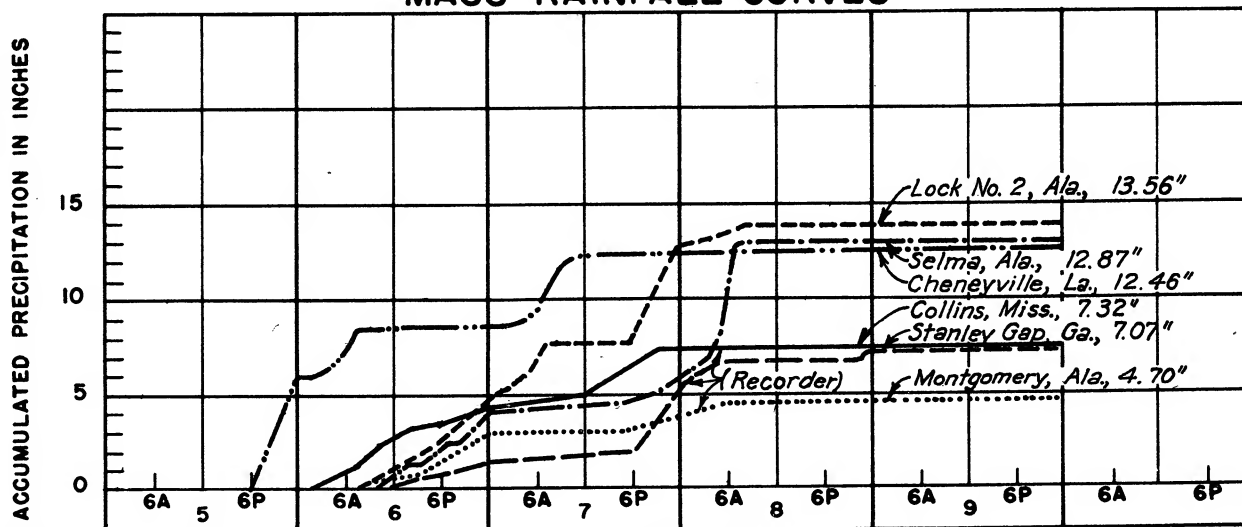
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

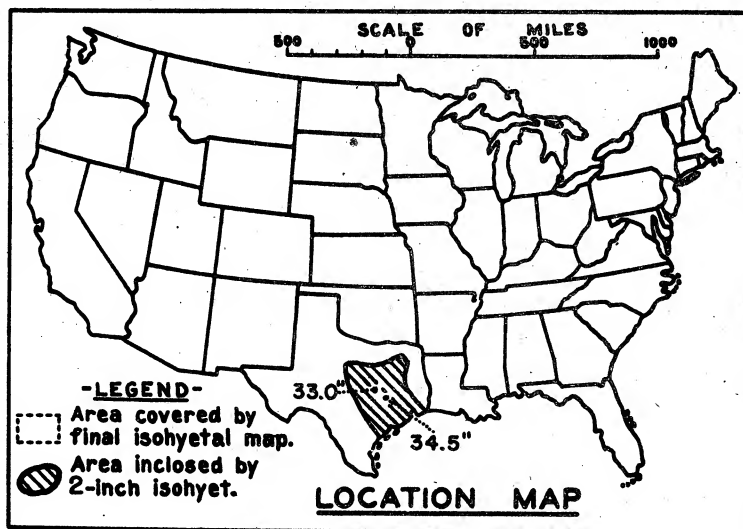
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	108
10	7.9	8.9	9.0	9.0	11.0	12.2	13.4	13.6	13.6	13.6
100	6.3	7.7	8.6	8.6	9.8	11.4	13.2	13.5	13.5	13.5
200	5.8	7.4	8.5	8.5	9.5	11.1	13.0	13.3	13.3	13.3
500	5.1	6.8	8.2	8.2	9.0	10.7	12.7	13.0	13.1	13.1
1,000	4.7	6.4	7.8	7.9	8.5	10.2	12.4	12.7	12.8	12.8
2,000	4.2	5.9	7.5	7.6	8.1	9.7	11.9	12.1	12.3	12.3
5,000	3.5	5.2	6.8	7.0	7.3	8.6	10.8	11.0	11.1	11.1
10,000	2.9	4.5	6.1	6.3	6.8	7.6	9.7	9.9	10.2	10.2
20,000	2.3	3.8	5.4	5.6	6.0	6.6	8.3	8.9	9.1	9.1
50,000	1.5	2.8	4.0	4.3	4.7	5.0	6.5	7.2	7.5	7.5
95,000	1.0	2.0	2.5	2.9	3.4	3.7	5.1	5.8	6.1	6.1

STORM STUDIES - ISOHYETAL MAP

Storm of April 5-9, 1938 Assignment GM 2-25Study Prepared by: Mobile, Ala., District
South Atlantic Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 27 June-1 July 1899

Assignment CM 3-4

Location Texas

Study Prepared by:

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/1/46Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/12/47Remarks: Center at Hearne and
Turnersville, Texas**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data).....	2
Form 5001-B (24-hour " ").....	21
Form 5001-D (" " " ").....	-
Misc. precip. records, meteorological data, etc.....	22
Form 5002 (Mass rainfall curves).....	21

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

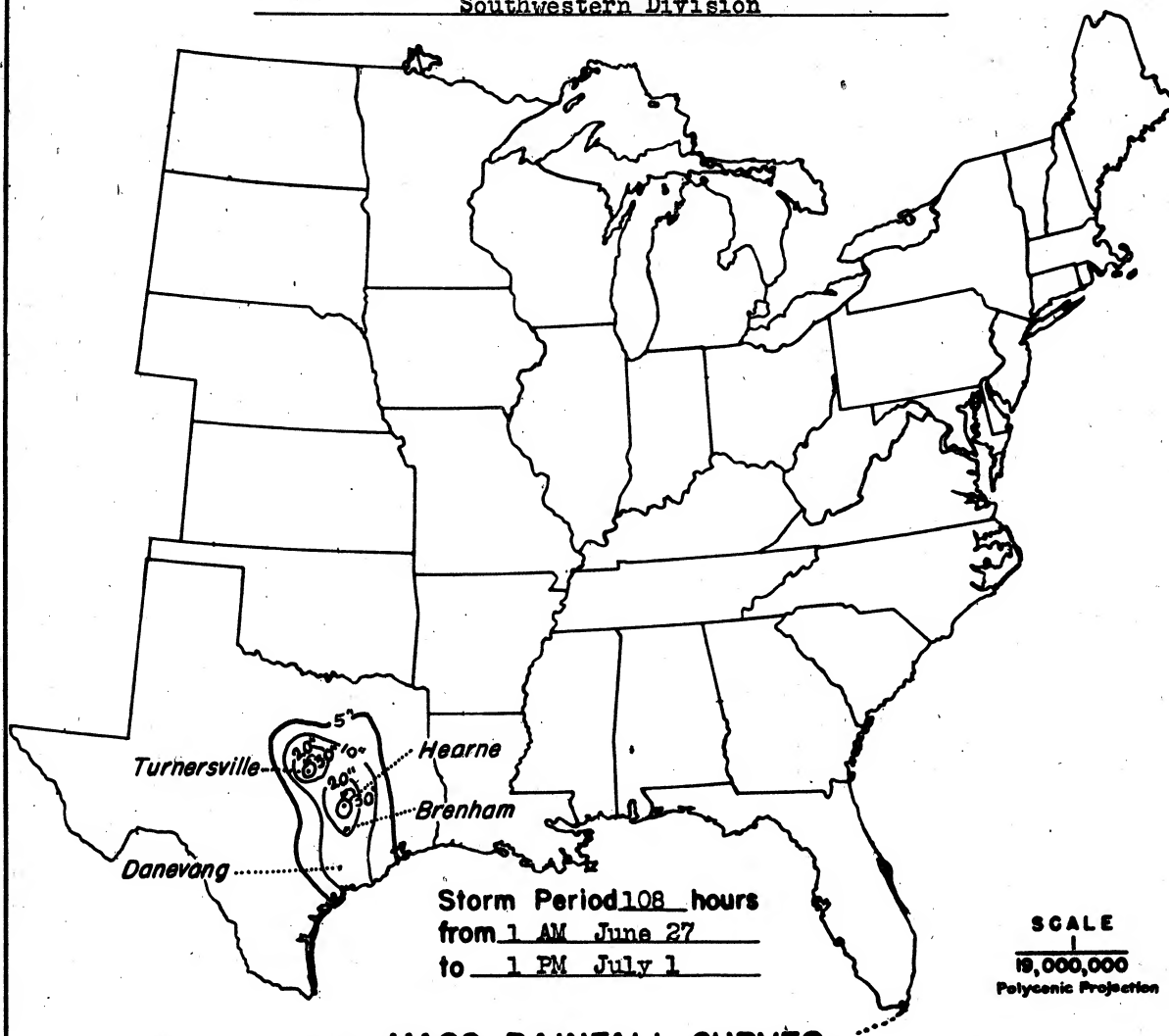
Form S-10 (Data from mass rainfall curves).....	2
Form S-11 (Depth-area data from isohyetal map).....	1
Form S-12 (Maximum depth-duration data).....	5
Maximum duration-depth-area curves.....	1
Data relating to periods of maximum rainfall.....	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

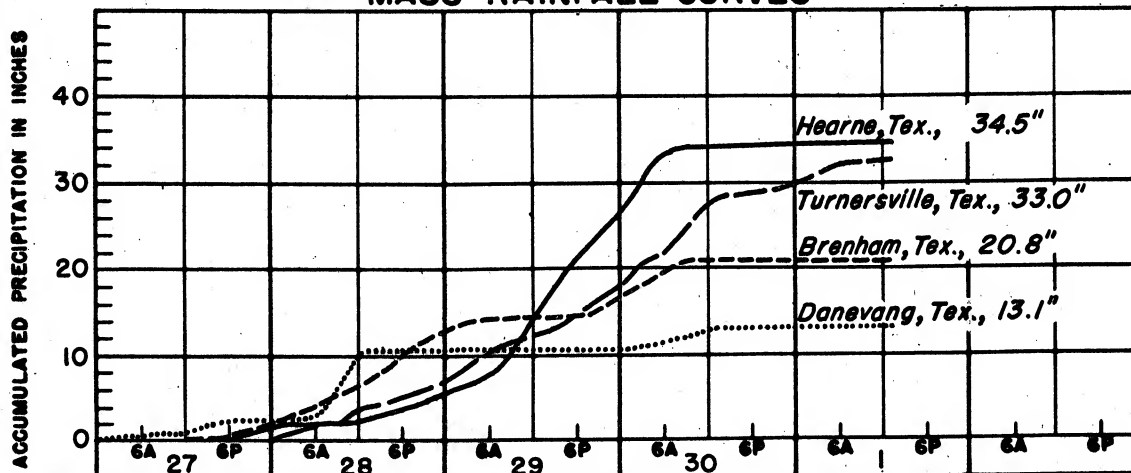
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	6.9	12.6	18.6	24.1	26.4	29.0	30.8	34.0	34.5	34.5	34.5
100	6.3	12.1	18.1	23.3	25.7	28.2	30.0	32.8	33.6	33.6	33.6
200	6.2	11.8	17.8	23.0	25.3	27.8	29.5	32.2	33.1	33.1	33.1
500	5.8	11.3	17.2	22.2	24.5	26.9	28.5	31.2	32.0	32.0	32.0
1,000	5.5	10.8	16.3	21.1	23.1	25.6	27.1	29.7	30.4	30.5	30.5
2,000	5.1	9.8	14.6	19.0	20.8	23.1	24.8	27.4	28.1	28.5	28.5
5,000	4.2	7.8	11.4	14.7	16.4	18.7	20.7	23.6	24.4	25.1	25.3
10,000	3.5	6.0	8.7	11.2	13.1	15.1	17.4	20.5	21.3	22.1	22.5
20,000	2.8	4.5	6.3	8.2	9.7	11.6	13.8	16.5	17.6	18.6	19.0
50,000	1.9	2.7	3.7	4.8	5.6	6.9	8.5	9.9	11.0	12.0	12.4
78,000	1.2	1.9	2.5	3.2	3.8	4.5	5.9	6.8	7.6	8.7	9.1

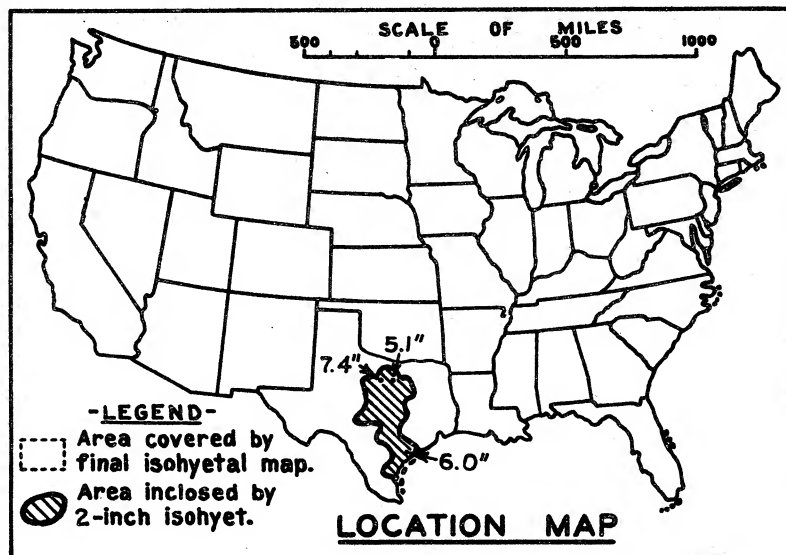
STORM STUDIES - ISOHYETAL MAP

Storm of June 27-July 1, 1899 Assignment GM 3-4
Study Prepared by: Galveston, Tex. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of October 24-26, 1904

Assignment GM 3-11

Location Texas

Study Prepared by:

Southwestern Division,
Galveston District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 2/19/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 5/23/44Remarks: Center at
Weatherford, Texas**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	6
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	6
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	17

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

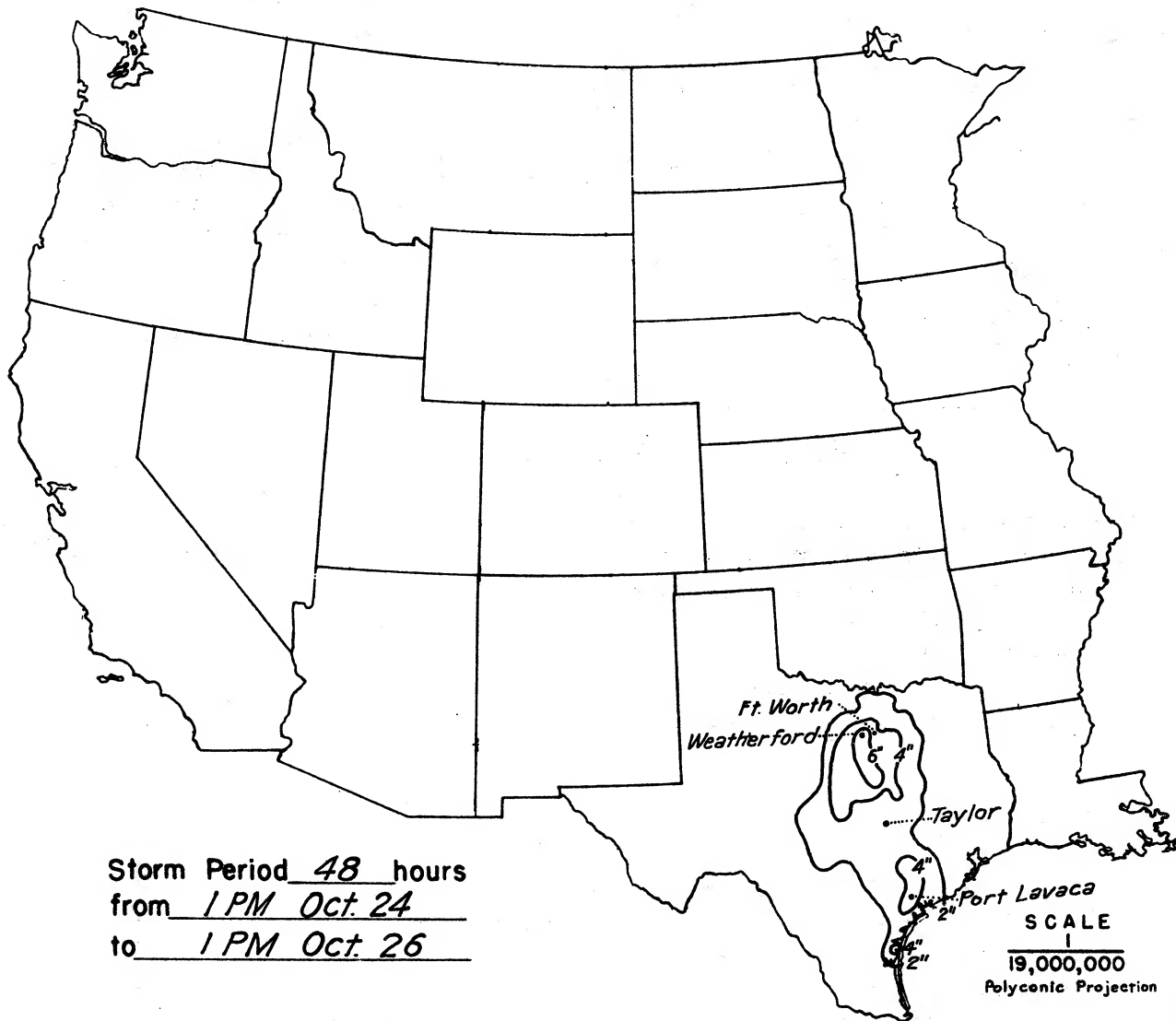
Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

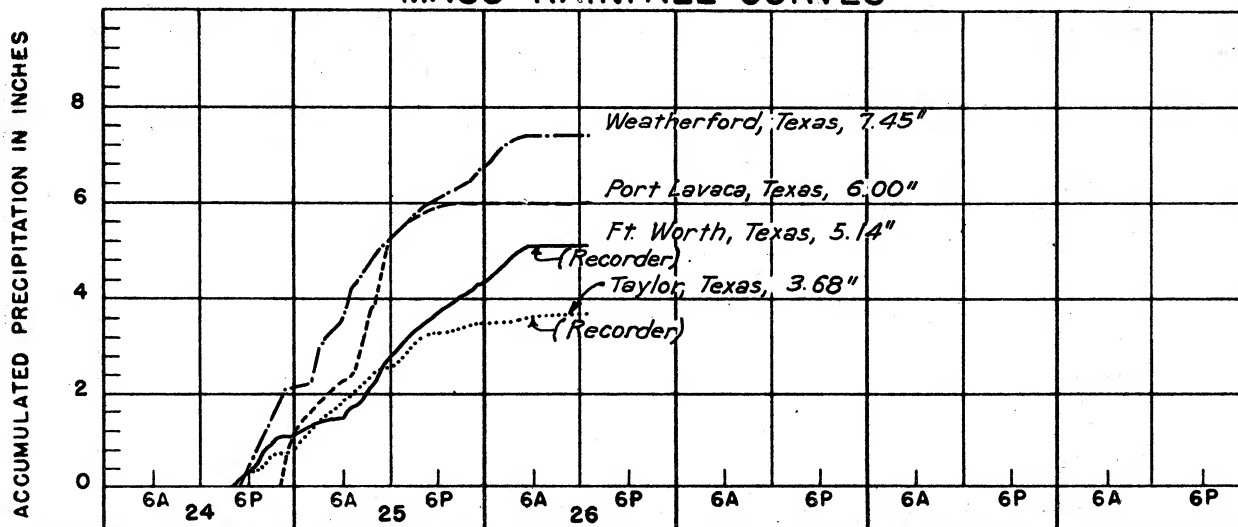
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
10	3.2	4.0	5.1	6.1	6.7	7.4	7.4					
100	2.7	3.5	4.6	5.4	6.1	6.8	7.2					
200	2.5	3.3	4.4	5.2	5.9	6.7	7.1					
500	2.3	3.1	4.2	4.9	5.7	6.5	7.0					
1,000	2.1	2.9	4.0	4.7	5.5	6.3	6.8					
2,000	2.0	2.8	3.8	4.5	5.3	6.0	6.5					
5,000	1.7	2.5	3.5	4.2	5.0	5.7	6.1					
10,000	1.5	2.3	3.3	4.0	4.6	5.3	5.6					
20,000	1.3	2.1	3.1	3.7	4.3	4.7	4.9					
40,000	1.1	1.9	2.8	3.3	3.7	4.0	4.2					
50,000	1.0	1.8	2.6	3.1	3.5	3.7	3.9					
60,000	1.0	1.8	2.5	2.9	3.3	3.5	3.7					

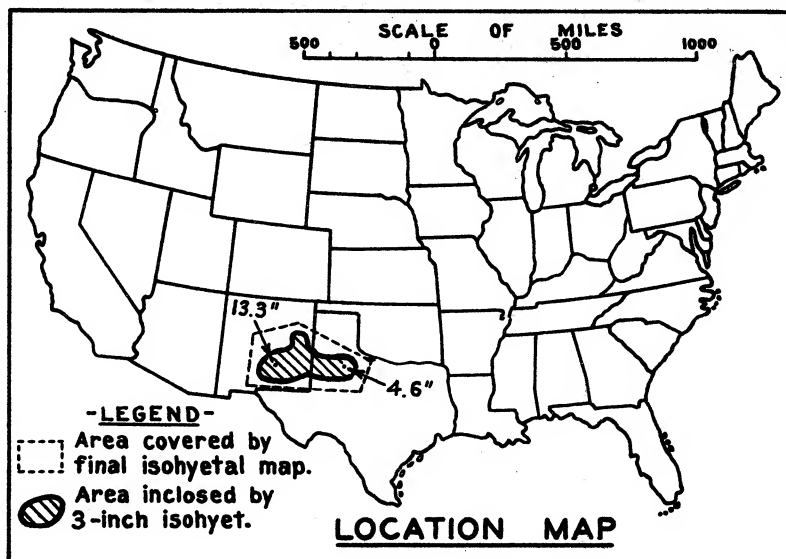
STORM STUDIES - ISOHYETAL MAP

Storm of October 24-26, 1904 Assignment GM 3-11
Study Prepared by: Galveston, Texas, District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of July 21-25, 1905
 Assignment GM 3-13
 Location New Mexico and Texas
 Study Prepared by:
 Southwestern Division,
 Galveston District Office.

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/14/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/18/44
 Remarks: Center at
 Elk, N. Mex.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:	(Number of Sheets)
Form 5001-C (Hourly precip. data)-----	2
Form 5001-B (24-hour " ")-----	7
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	9

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

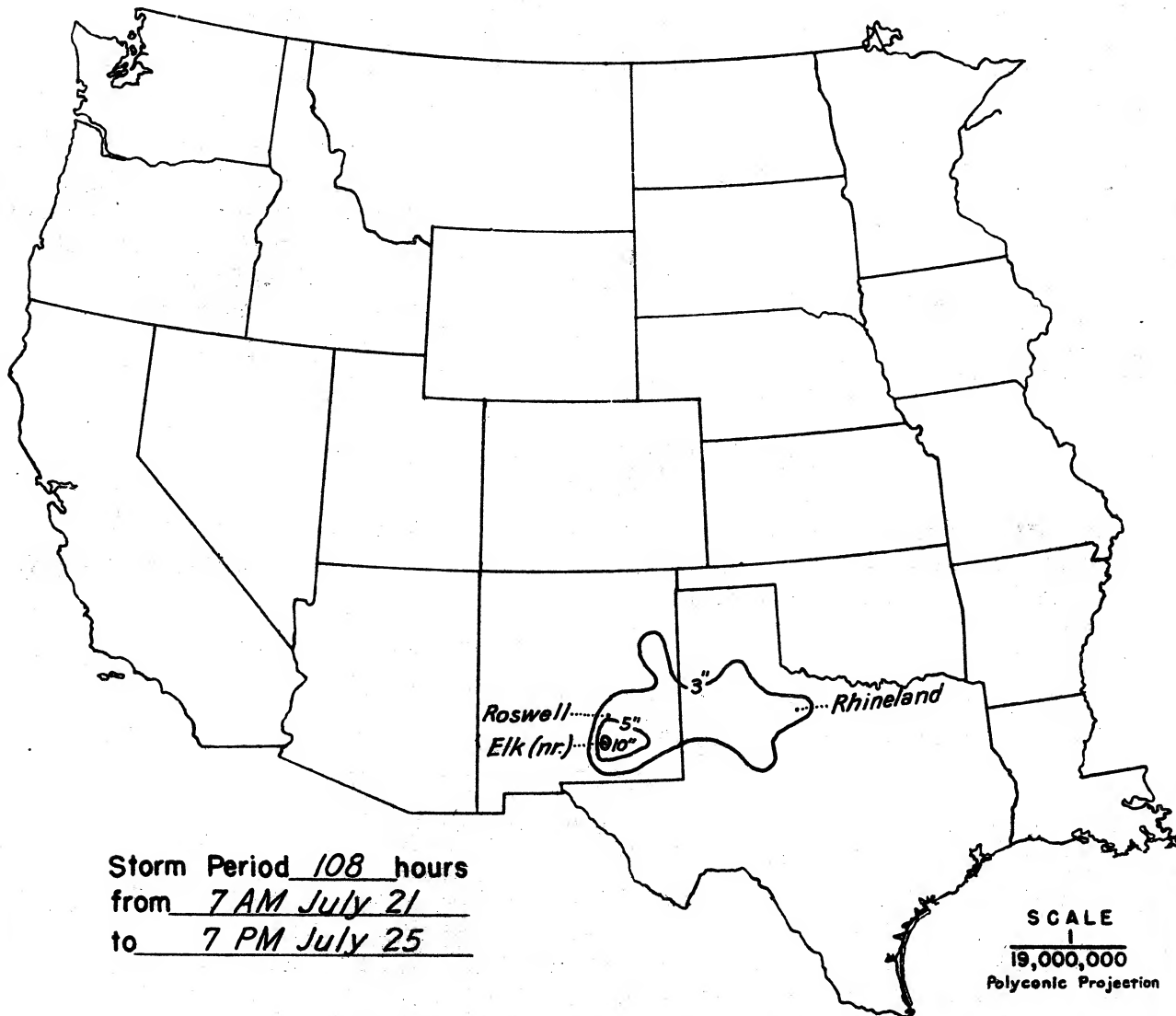
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	1
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

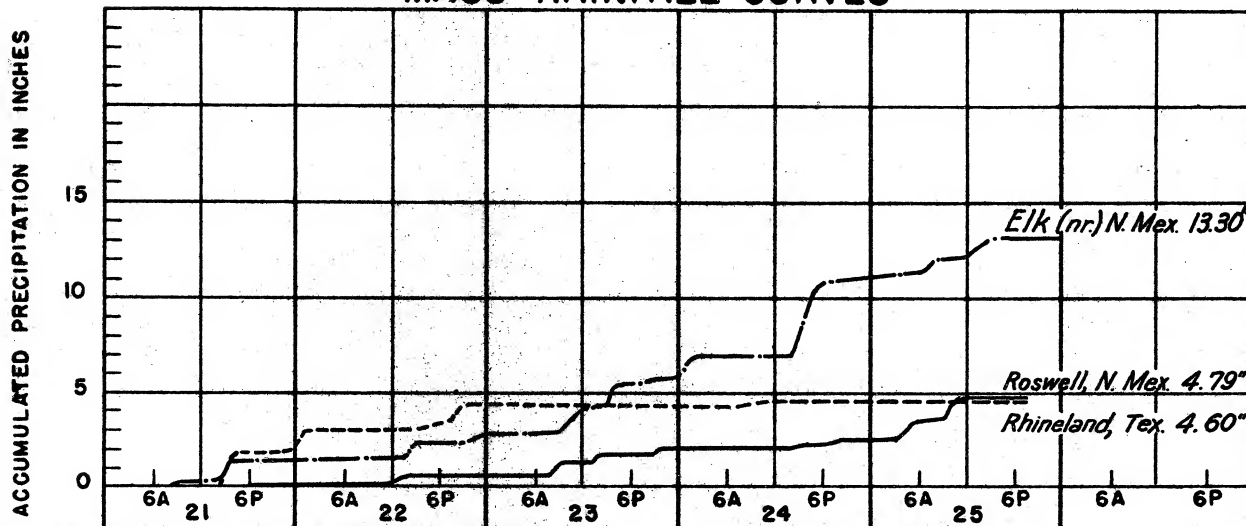
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

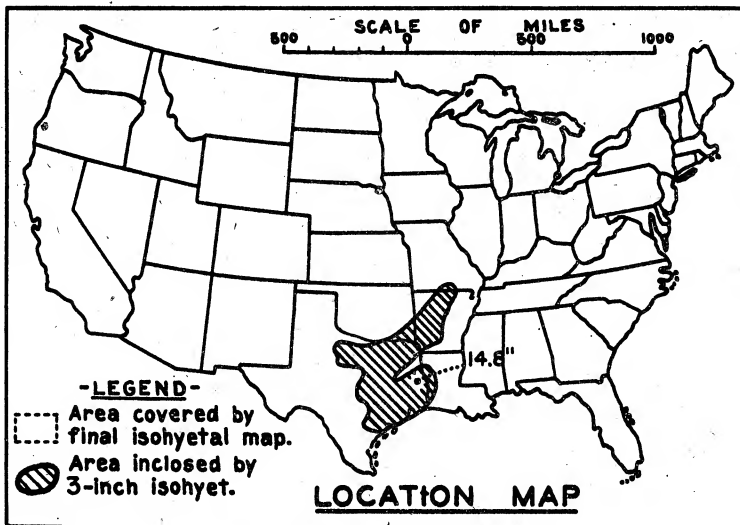
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
Max. Sta.	3.9	4.3	5.1	6.0	6.8	7.9	9.1	10.3	11.0	12.7	13.3
10	3.9	4.3	4.9	5.7	6.6	7.7	8.8	10.1	10.8	12.2	13.1
100	3.5	3.9	4.3	5.1	5.9	7.0	7.8	9.0	9.7	10.9	11.7
200	3.3	3.7	4.1	4.8	5.6	6.6	7.4	8.5	9.2	10.3	11.0
500	3.0	3.3	3.7	4.3	5.1	5.9	6.7	7.7	8.3	9.3	10.0
1,000	2.6	2.9	3.3	3.9	4.5	5.3	6.0	7.0	7.6	8.5	9.0
2,000	2.2	2.5	2.7	3.4	3.9	4.5	5.3	6.2	6.7	7.5	7.9
5,000	1.5	1.9	2.1	2.7	3.0	3.5	4.2	5.0	5.5	6.1	6.4
10,000	1.1	1.4	1.6	2.1	2.3	2.7	3.2	4.0	4.5	4.9	5.3
20,000	0.8	1.1	1.2	1.6	1.8	2.0	2.5	3.1	3.6	4.0	4.3
44,000	0.5	0.8	0.9	1.1	1.4	1.6	2.0	2.5	3.0	3.6	3.8

STORM STUDIES - ISOHYETAL MAP

Storm of July 21-25, 1905 Assignment GM 3-13Study Prepared by: Galveston, Texas District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 24 - 28 April 1914

Assignment GM 3 - 26

Location Tex., La., Ark.

Study Prepared by:

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 2/2/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 4/16/46Remarks: Center at
Merryville, La.**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 2 sheets, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	16
Form 5001-B (24-hour " ")-----	55
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	-
Form 5002 (Mass rainfall curves)-----	55

PART II

Final isohyetal maps, in 2 sheets, scale 1:1,000,000

Data and computation sheets:

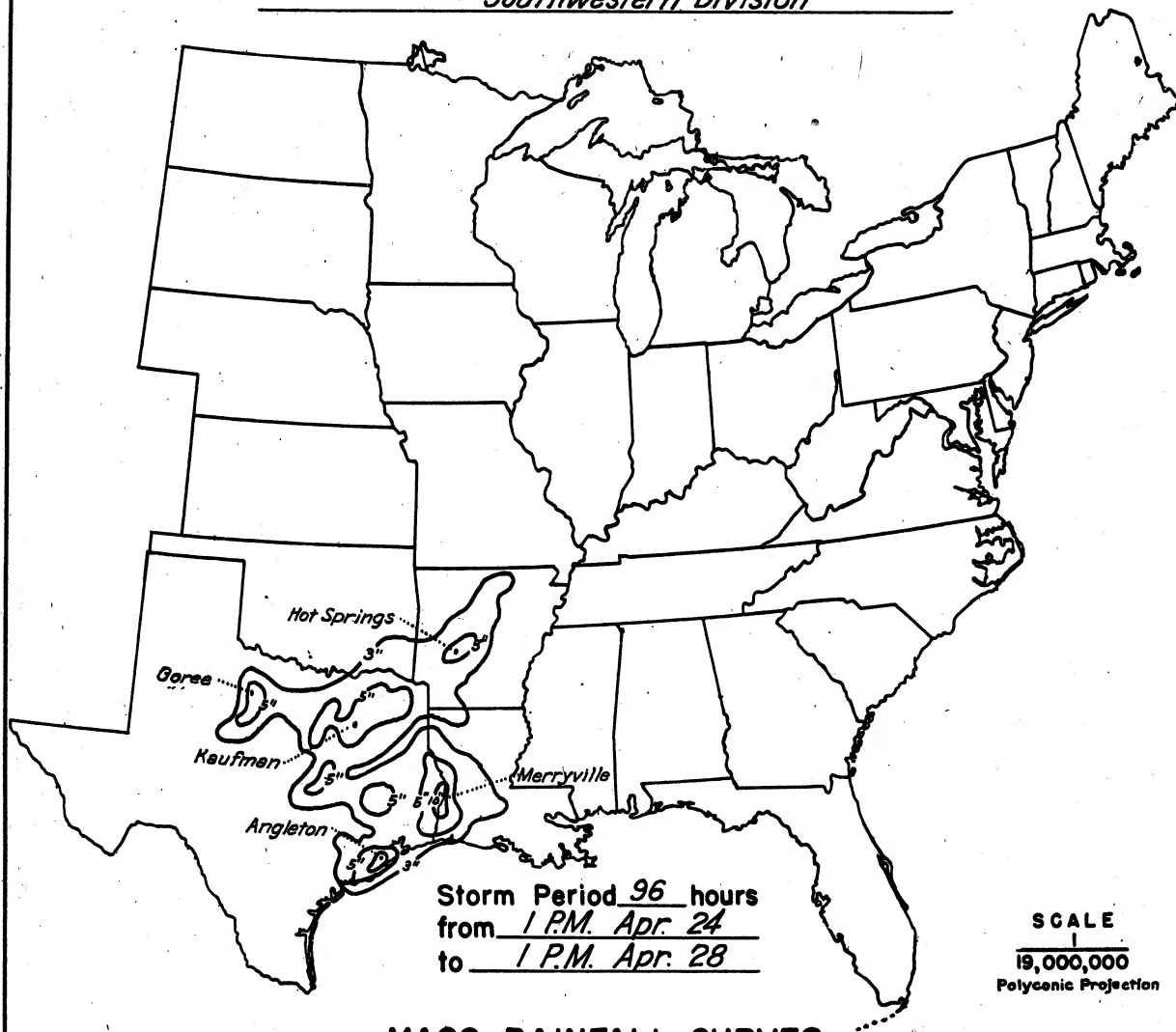
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

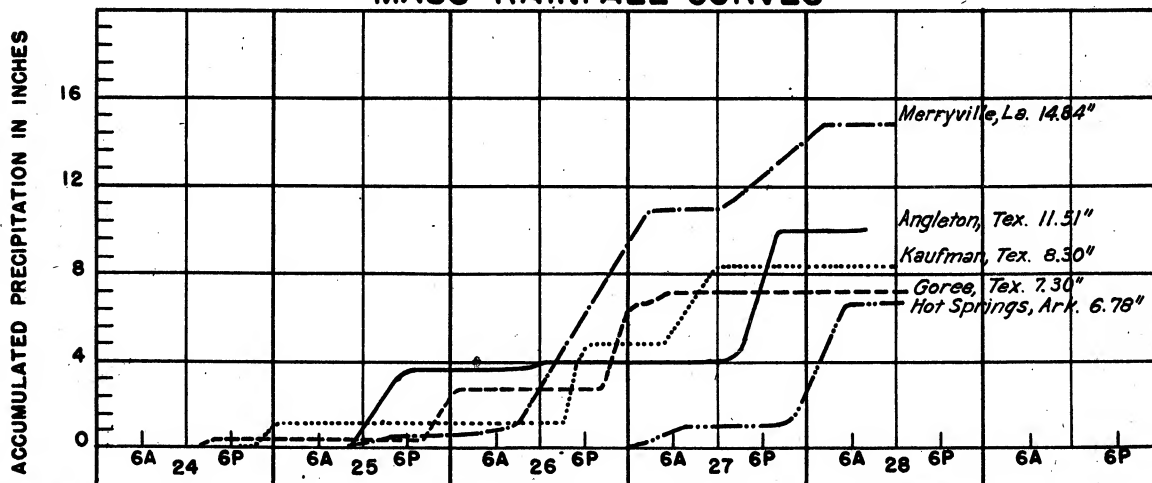
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	
10	6.0	7.6	9.5	10.1	10.5	12.4	14.1	14.4	14.8	14.8	
100	5.7	7.0	8.9	9.6	9.9	11.5	13.2	13.6	14.0	14.0	
200	5.5	6.7	8.6	9.4	9.6	11.1	12.8	13.2	13.6	13.6	
500	5.1	6.1	8.1	8.8	9.0	10.5	12.2	12.6	13.0	13.0	
1,000	4.6	5.6	7.5	8.1	8.4	9.8	11.5	11.9	12.3	12.3	
2,000	4.0	5.1	6.6	7.2	7.4	8.7	10.5	10.8	11.4	11.4	
5,000	2.9	4.3	5.2	5.7	5.9	6.9	8.4	8.6	9.3	9.5	
10,000	2.3	3.7	4.2	4.7	4.9	5.5	6.6	6.8	7.5	8.1	
20,000	1.8	3.1	3.5	3.9	4.1	4.3	5.1	5.3	6.1	6.9	
50,000	1.3	2.3	2.8	3.1	3.3	3.4	4.0	4.2	4.8	5.4	
100,000	1.0	1.8	2.2	2.6	2.8	3.0	3.5	3.6	4.1	4.7	

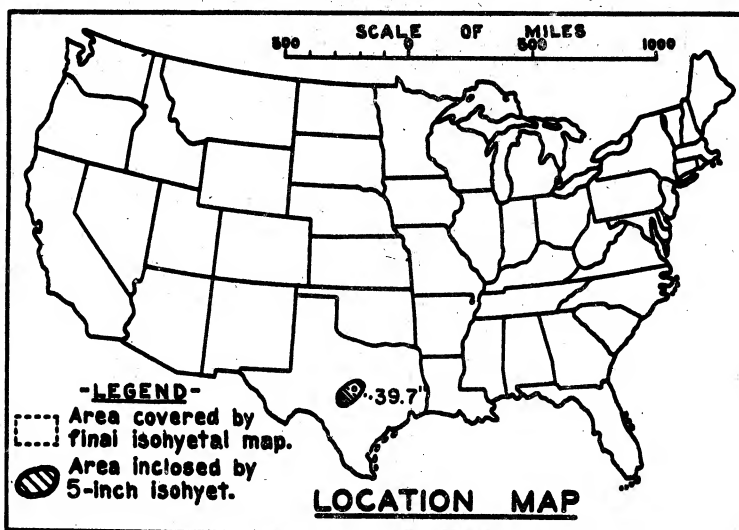
STORM STUDIES - ISOHYETAL MAP

Storm of April 24-28, 1914 Assignment GM 3-26
Study Prepared by: Galveston, Tex. District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 8-10 Sept. 1921

Assignment CM 4-12

Location Central Texas

Study Prepared by:

Southwestern Division

Galveston District Office

& Hydrometeorological Section

Part I Reviewed by H. M. Sec. of
Weather Bureau, 8/20/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 11/7/46Remarks: Center near
Thrall (Taylor), Texas**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	7
Form 5001-B (24-hour " ")-----	23
Form 5001-D (" " " ")-----	2
Misc. precip. records, meteorological data, etc.-----	30
Form 5002 (Mass rainfall curves)-----	35

PART IIFinal isohyetal maps, in 1 sheet, scale 1:500,000

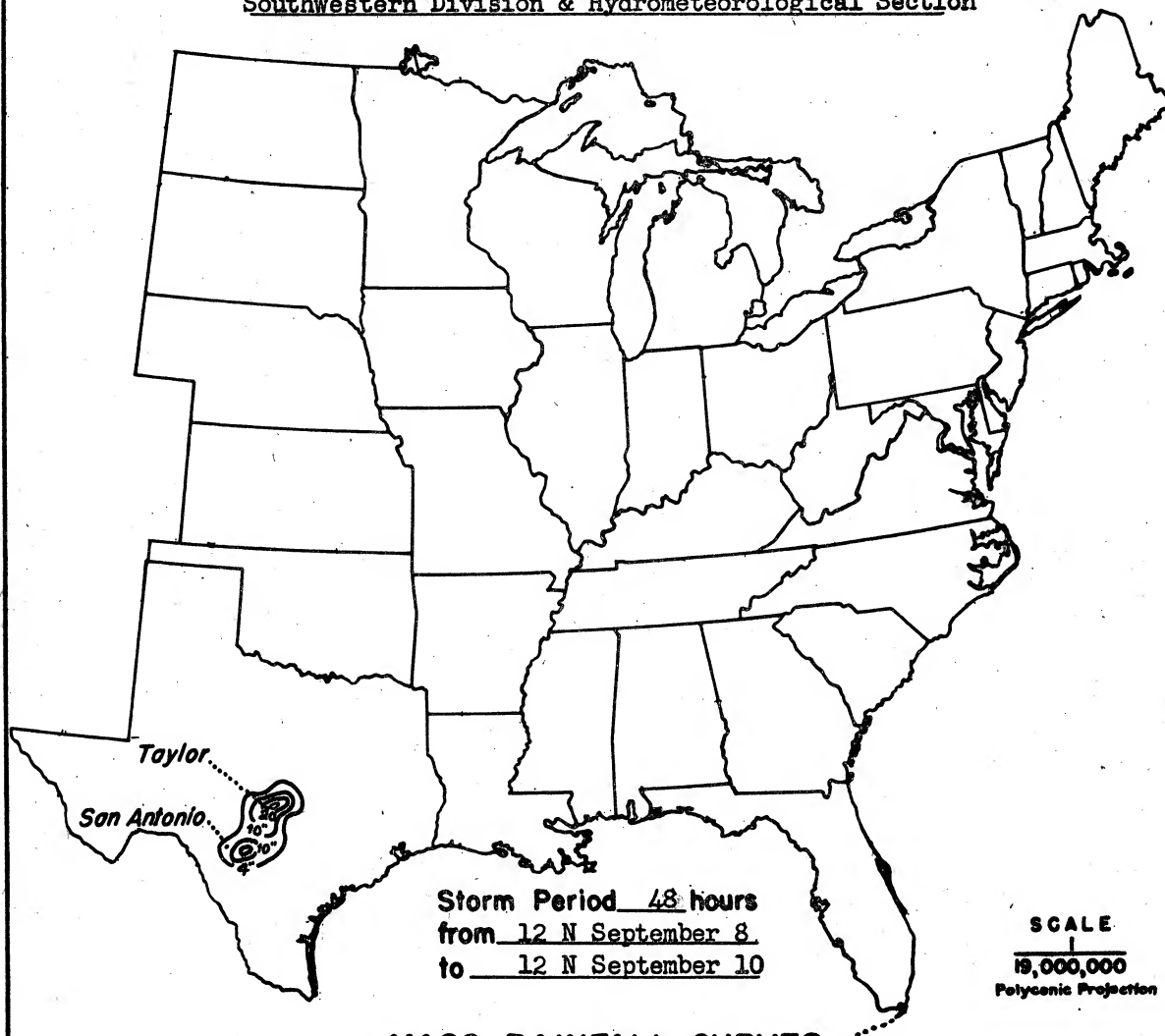
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	38
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	--

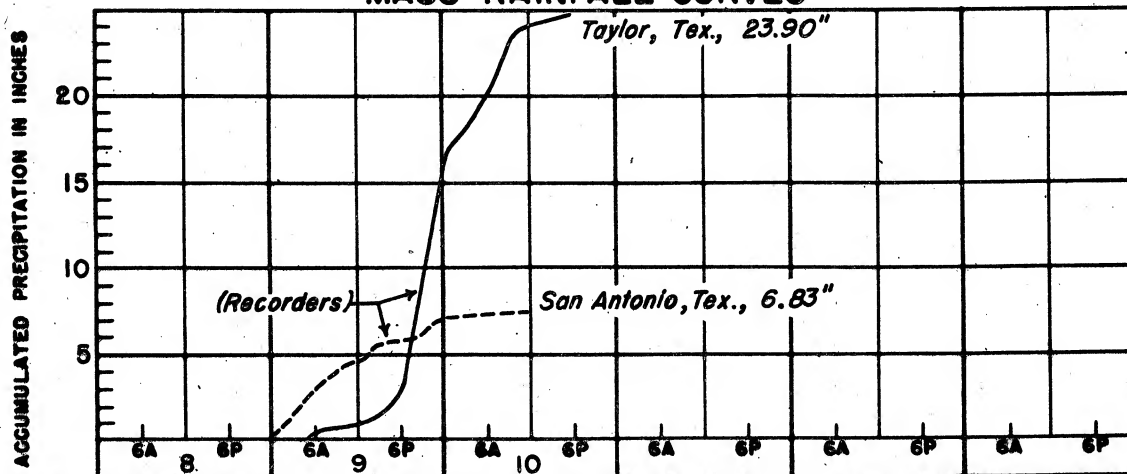
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

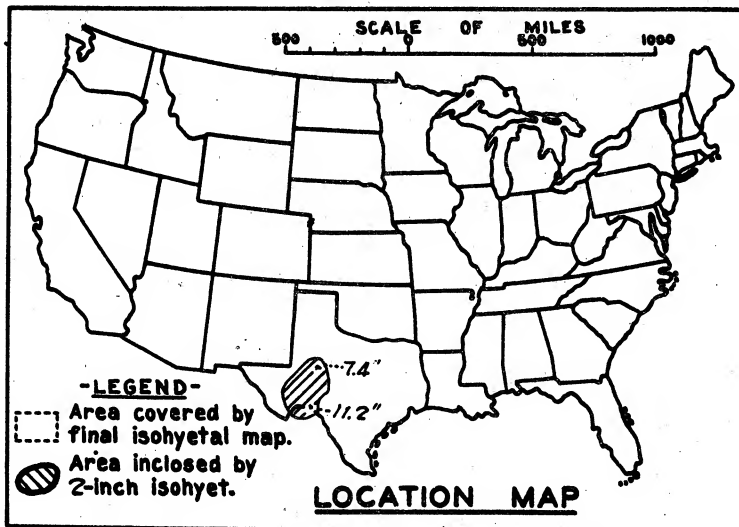
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	48					
Max. Station	23.4	31.8	36.4	38.2	39.2	39.7	39.7					
10	22.4	29.8	35.0	36.5	37.2	37.6	37.6					
100	19.6	26.2	30.7	31.9	32.6	32.9	32.9					
200	17.9	24.3	28.7	29.7	30.4	30.7	30.8					
500	15.4	21.4	25.6	26.6	27.3	27.6	27.7					
1,000	13.4	18.8	22.9	24.0	24.6	24.9	25.1					
2,000	11.2	15.7	19.5	20.6	21.2	21.5	21.6					
5,000	8.1	11.1	14.1	15.0	15.9	16.2	16.3					
10,000	5.6	7.7	9.7	10.7	11.8	12.1	12.2					
12,500	4.7	6.7	8.4	9.4	10.3	10.7	10.9					

STORM STUDIES - ISOHYETAL MAP

Storm of September 8-10, 1921 Assignment GM 4-12Study Prepared by: Galveston, Tex. District
Southwestern Division & Hydrometeorological Section

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 27-29 May 1925

Assignment CM 4 - 21

Location Texas and Mexico

Study Prepared by:

Southwestern Division,
Galveston District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 5/11/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 7/26/46Remarks: Centers at
Eagle Pass, Texas and
Water Valley, Texas**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:2,500,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	<u>2</u>
Form 5001-B (24-hour " ")-----	<u>9</u>
Form 5001-D (" " " ")-----	<u>0</u>
Miscl. precip. records, meteorological data, etc.-----	<u>0</u>
Form 5002 (Mass rainfall curves)-----	<u>10</u>

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

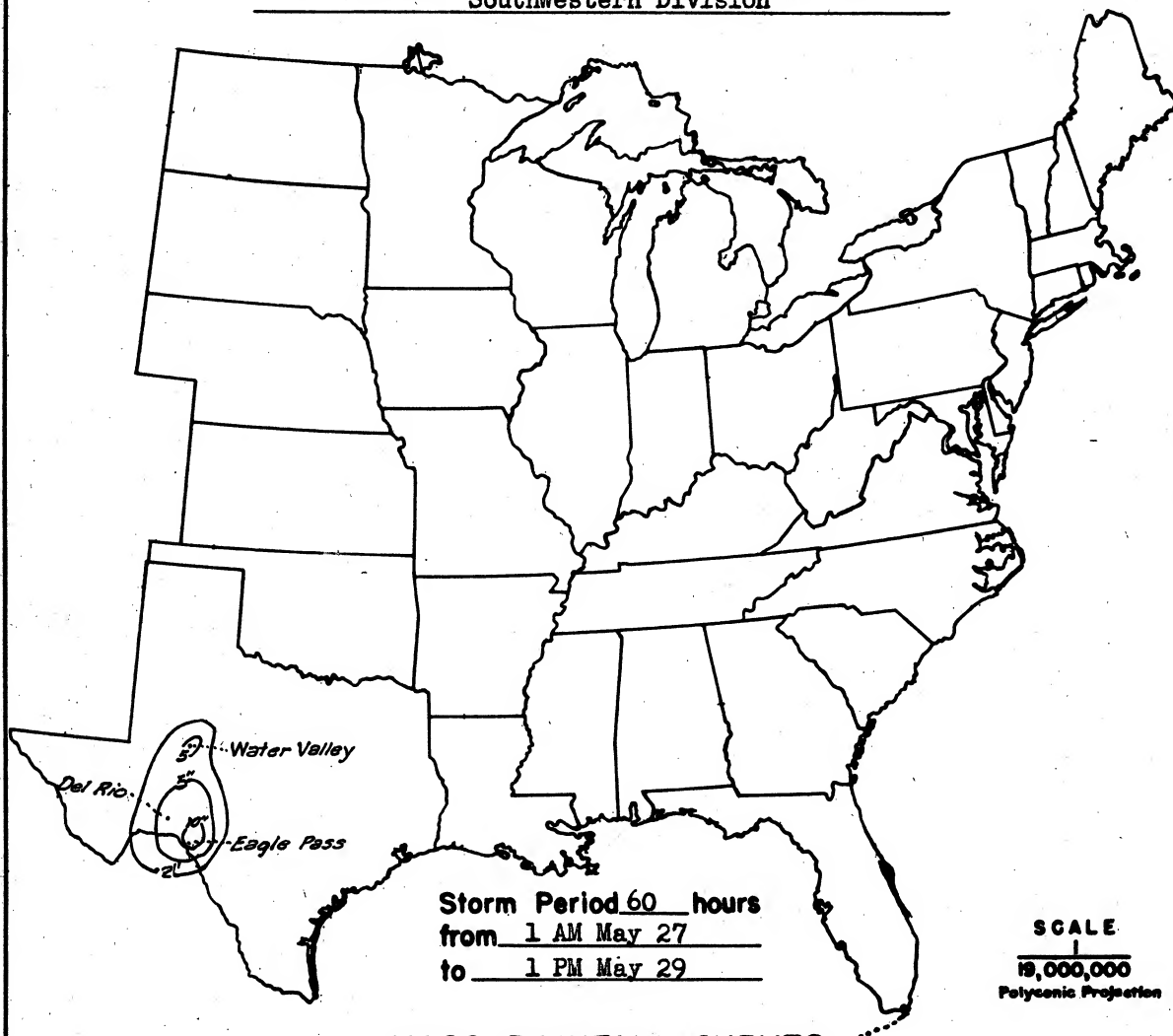
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	<u>1</u>
Form S-11 (Depth-area data from isohyetal map)-----	<u>1</u>
Form S-12 (Maximum depth-duration data)-----	<u>2</u>
Maximum duration-depth-area curves-----	<u>1</u>
Data relating to periods of maximum rainfall-----	<u>2</u>

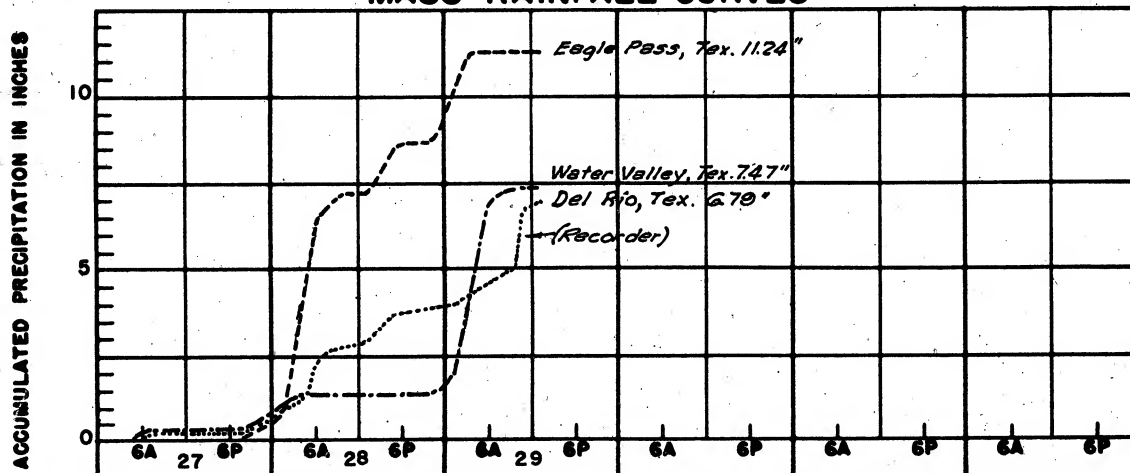
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

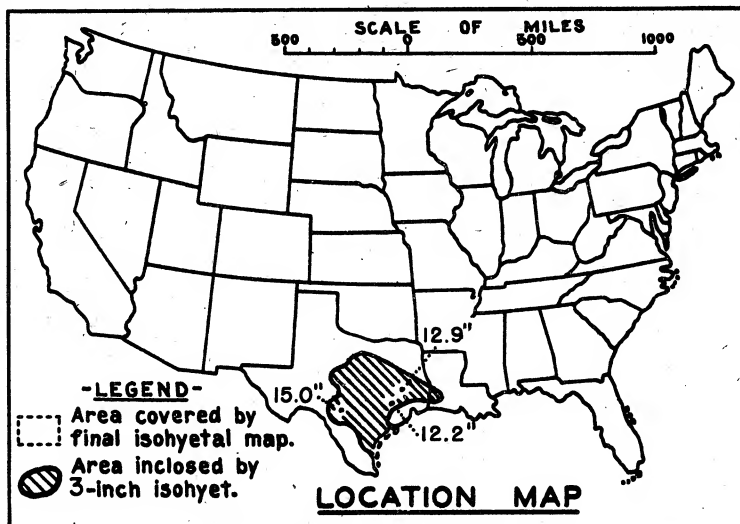
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60			
10	6.3	7.0	8.3	9.0	11.0	11.2	11.2	11.2			
100	6.0	6.5	7.7	8.5	10.0	10.5	10.5	10.5			
200	5.7	6.2	7.4	8.1	9.5	10.0	10.0	10.0			
500	5.3	5.8	6.9	7.5	8.7	9.3	9.3	9.3			
1,000	5.0	5.5	6.5	7.1	8.1	8.7	8.8	8.8			
2,000	4.7	5.2	6.0	6.6	7.5	8.2	8.3	8.3			
5,000	4.1	4.6	5.3	5.9	6.6	7.3	7.5	7.5			
10,000	3.6	4.1	4.6	5.2	5.8	6.5	6.7	6.8			
20,000	2.8	3.3	3.8	4.3	4.7	5.4	5.8	6.0			
47,100	1.4	1.9	2.2	2.5	2.9	3.4	4.1	4.4			

STORM STUDIES - ISOHYETAL MAP

Storm of May 27 - 29, 1925Assignment GM 4-21Study Prepared by: Galveston, Texas District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 25-30 May 1929
 Assignment CM 4- 26
 Location Texas and Louisiana
 Study Prepared by:
 Southwestern Division
 Galveston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 11/9/45

Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/21/47

Remarks: Centers at
 Henly, Rockland and
 Fairbanks, Texas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	29
Form 5001-B (24-hour " ")-----	60
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	5
Form 5002 (Mass rainfall curves)-----	61

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

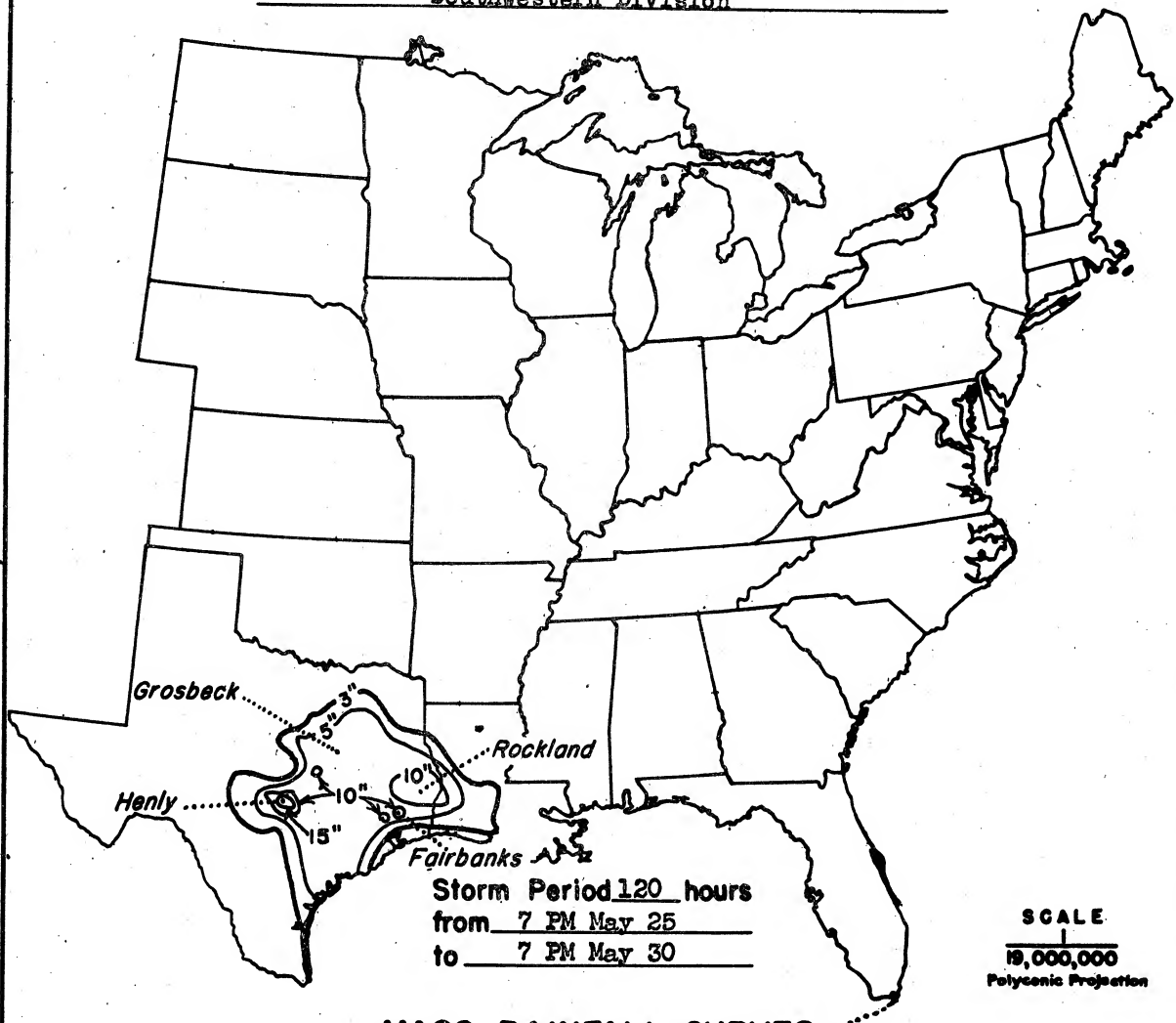
Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	1
Form S-12 (Maximum depth-duration data)-----	6
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

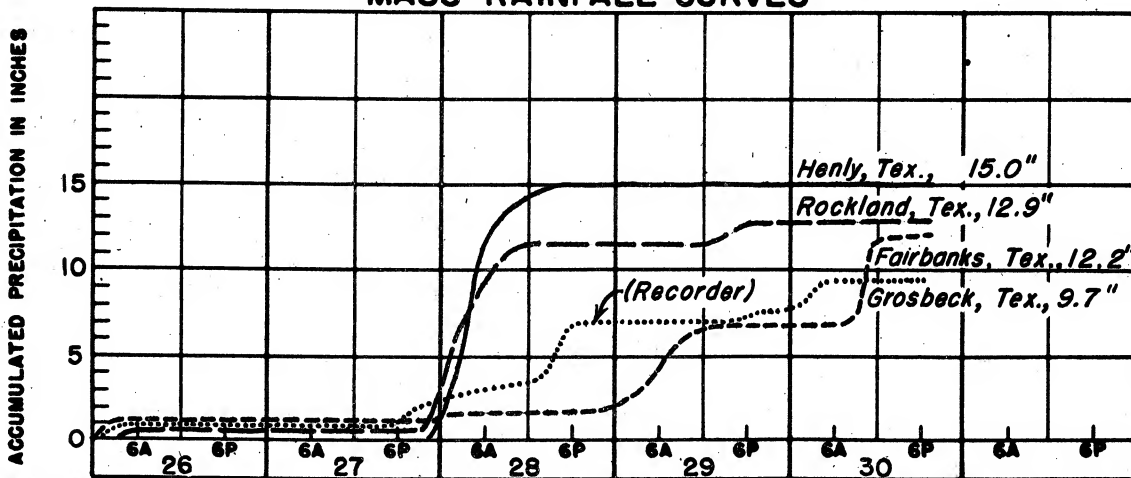
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	96	108	120
10	11.3	13.8	14.7	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
100	9.8	12.6	14.2	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
200	9.3	12.1	13.8	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
500	8.6	11.1	12.9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
1,000	7.9	10.0	11.7	12.2	12.2	12.2	12.2	12.3	12.5	12.7	12.7
2,000	6.5	8.3	9.9	10.4	10.5	10.6	10.8	10.8	11.5	11.9	11.9
5,000	4.8	6.3	7.4	7.9	8.2	8.3	8.7	9.2	10.1	10.6	10.6
10,000	3.8	5.1	6.1	6.9	7.1	7.3	7.8	8.2	9.0	9.6	9.7
20,000	2.9	4.1	5.1	6.0	6.2	6.3	7.1	7.4	8.1	8.7	8.8
50,000	1.7	2.7	3.5	4.3	4.5	4.8	5.5	6.0	6.5	7.0	7.4
79,000	1.1	2.0	2.6	3.2	3.6	3.9	4.5	4.9	5.3	5.7	6.1

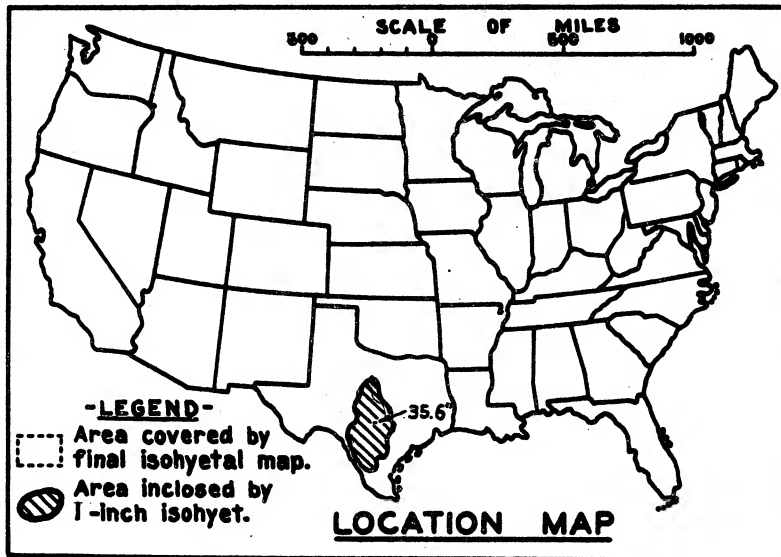
STORM STUDIES - ISOHYETAL MAP

Storm of May 25-30, 1929 Assignment GM 4-26
Study Prepared by: Galveston, Texas District
Southwestern Division



MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of June 30 - July 2, 1932

Assignment G M 5 - 1

Location Southwestern Texas

Study Prepared by:

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/7/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/28/45

Remarks: Center at :

State Fish Hatchery, Texas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	9
Form 5001-B (24-hour " ")-----	16
Form 5001-D (" " " ")-----	3
Misc. precip. records, meteorological data, etc.-----	5
Form 5002 (Mass rainfall curves)-----	23

PART II

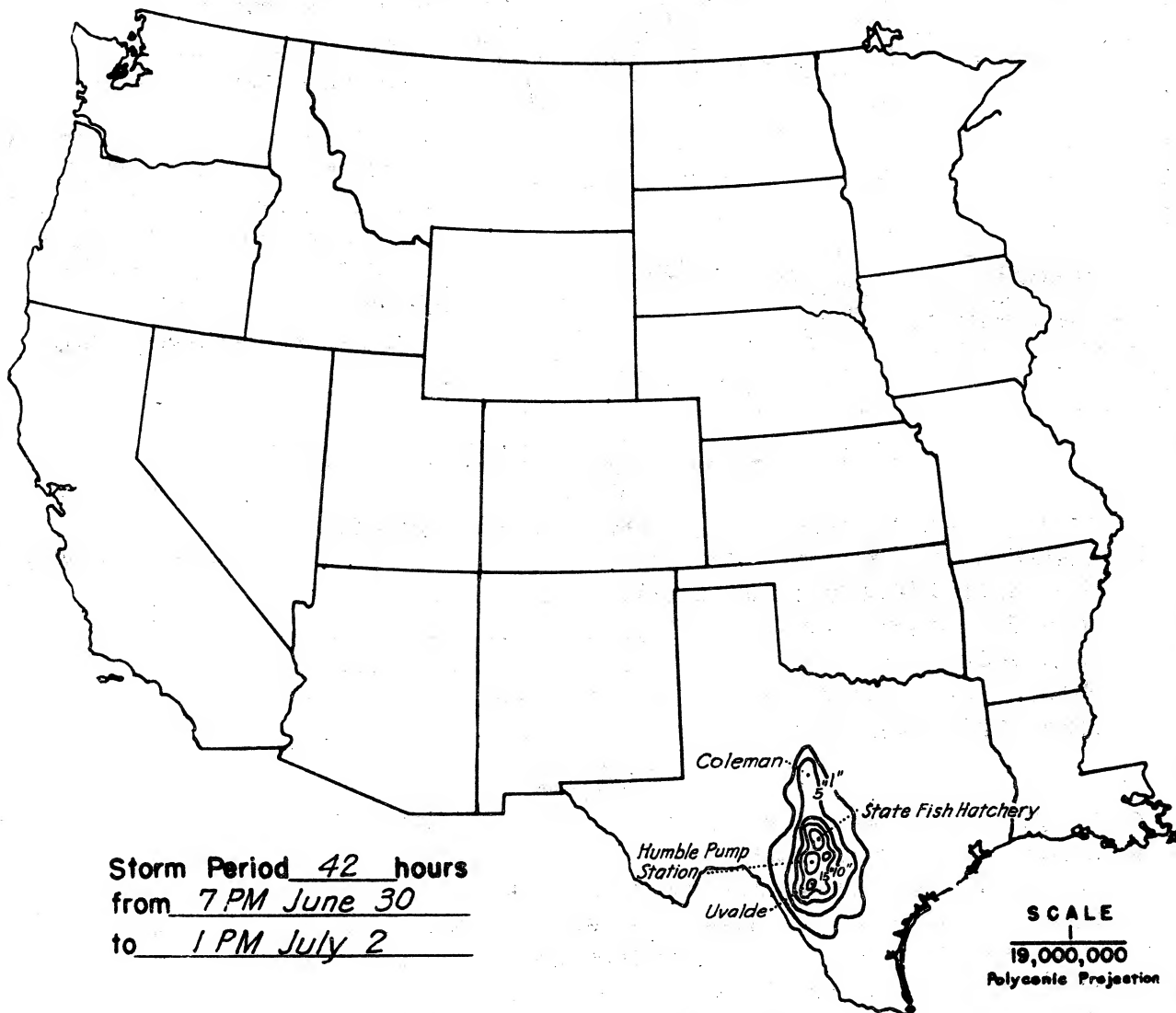
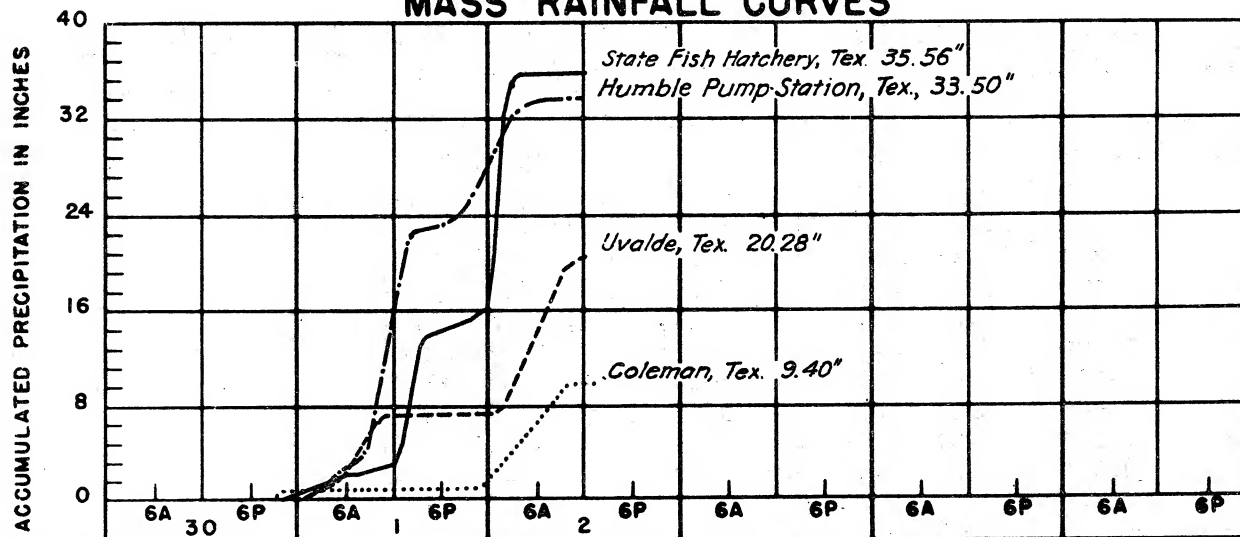
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

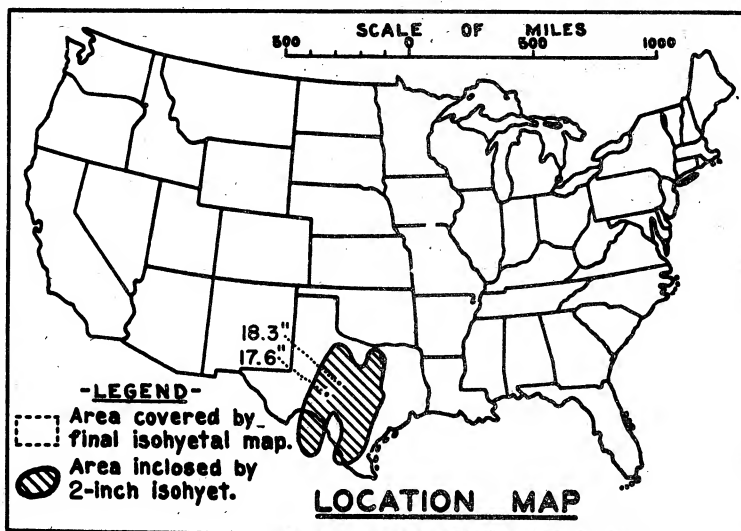
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	9
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	42					
Max. Station	19.6	21.4	32.4	33.6	34.6	35.6	35.6					
10	13.3	19.5	30.0	31.7	32.9	33.6	33.7					
15	12.9	19.2	29.3	30.8	32.0	32.6	32.8					
100	11.2	15.8	23.7	25.8	26.8	27.5	27.7					
200	10.3	14.3	21.2	23.8	24.9	25.5	25.7					
500	8.8	12.1	17.9	21.1	22.2	22.8	23.0					
1,000	7.7	10.5	15.5	19.0	20.2	20.7	20.9					
2,000	6.5	8.9	13.0	16.9	18.2	18.7	18.9					
5,000	4.8	6.8	9.8	13.5	14.9	15.3	15.6					
10,000	3.6	5.2	7.4	10.3	11.3	11.6	11.8					
20,000	2.4	3.6	4.9	7.0	7.7	7.9	8.1					
30,000	1.6	2.6	3.5	5.0	5.5	5.7	5.9					

STORM STUDIES - ISOHYETAL MAPStorm of June 30 - July 2, 1932 Assignment GM 5-1Study Prepared by: Galveston, Tex. District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 10-15 June 1935

Assignment GM 5-2

Location Texas - Mexico

Study Prepared by:

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 9/26/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/27/46

Remarks: Centers at

Segovia and Carta Valley
Texas.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)	16
Form 5001-B (24-hour " ")	36
Form 5001-D (" " " ")	--
Misc. precip. records, meteorological data, etc.	2
Form 5002 (Mass rainfall curves)	47

PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

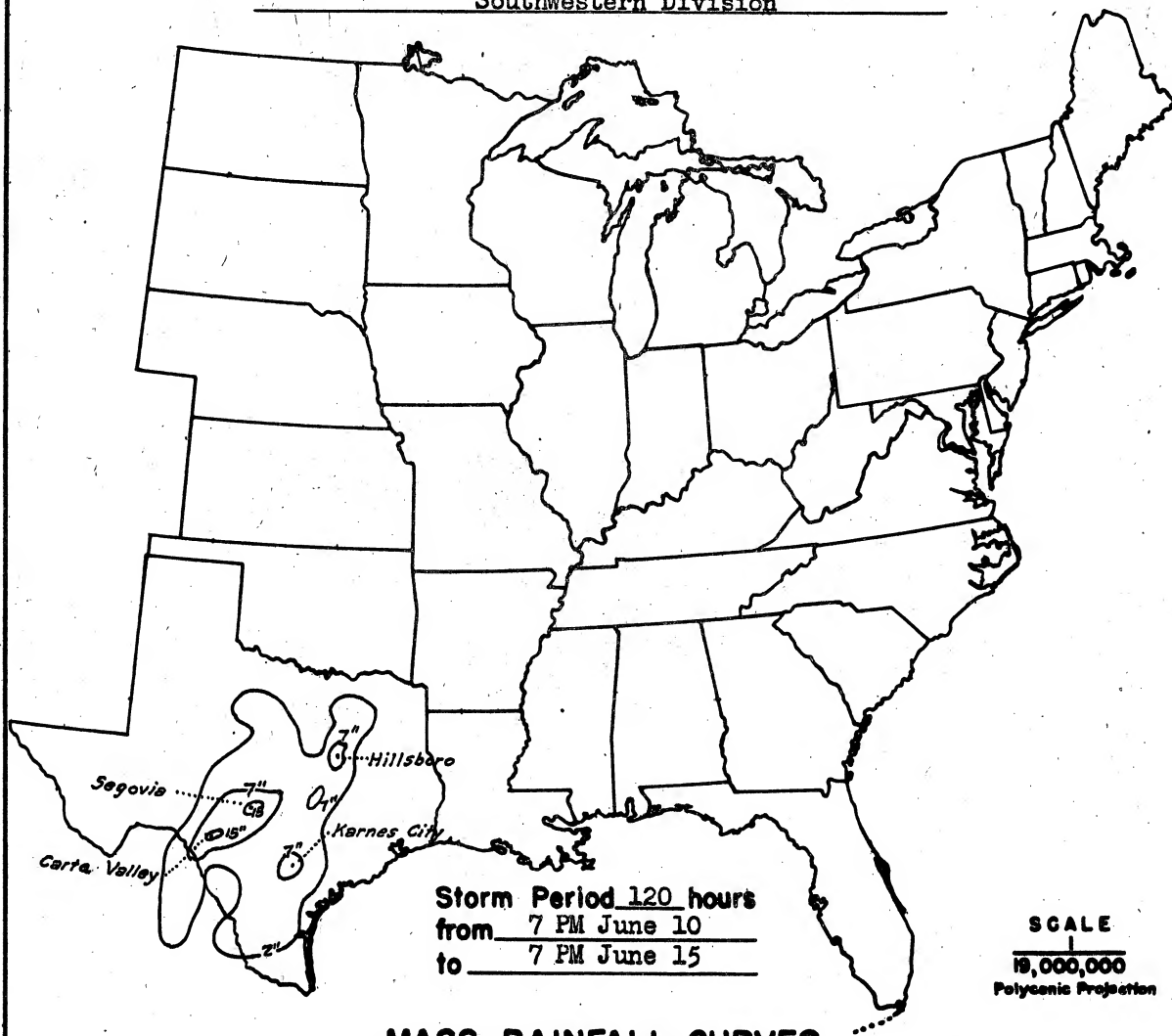
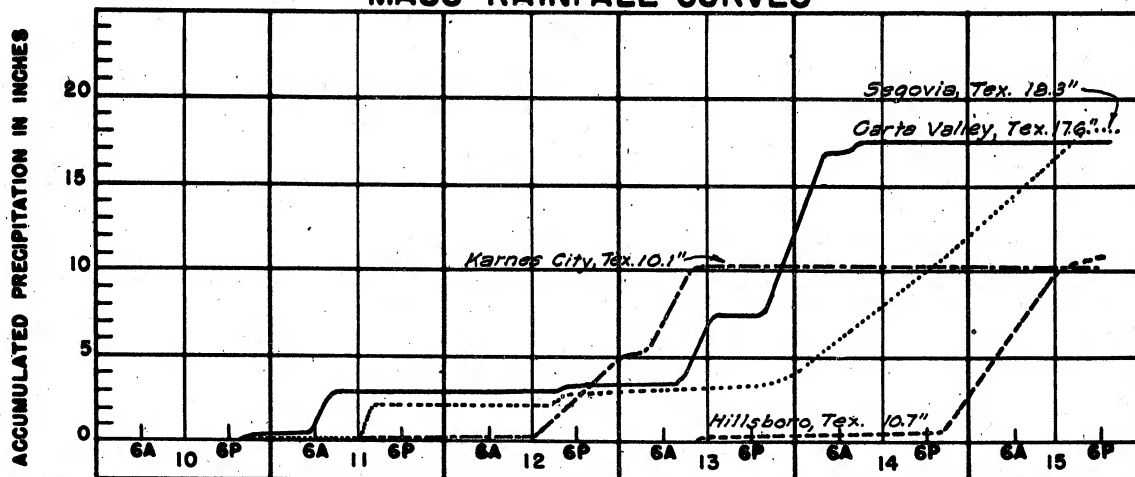
Form S-10 (Data from mass rainfall curves)	4
Form S-11 (Depth-area data from isohyetal map)	2
Form S-12 (Maximum depth-duration data)	9
Maximum duration-depth-area curves	1
Data relating to periods of maximum rainfall	3

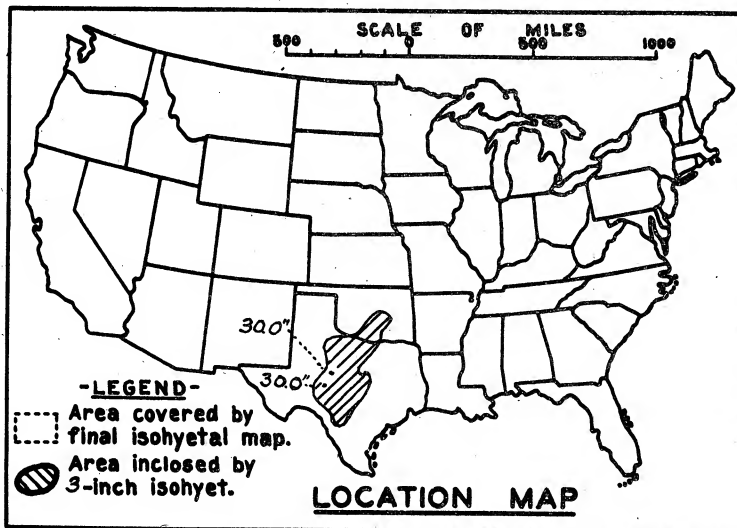
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	120
10	9.9	12.5	14.4	14.6	14.8	14.8	16.0	16.1	17.8	18.3	18.3
100	7.7	10.9	13.8	13.9	14.1	14.2	15.9	16.0	16.7	17.5	17.5
200	7.1	10.3	13.3	13.5	13.7	13.9	14.9	15.1	16.2	17.2	17.2
500	6.2	9.5	12.3	12.7	13.1	13.3	14.1	14.4	15.3	16.5	16.5
1,000	5.6	8.9	11.3	12.0	12.5	12.7	13.3	13.7	14.4	15.7	15.7
2,000	4.9	8.1	10.1	10.9	11.6	11.8	12.3	12.8	13.3	14.7	14.7
5,000	3.9	6.3	8.1	8.8	9.4	9.8	10.4	10.9	11.2	12.5	12.6
10,000	2.6	4.4	5.7	6.3	6.7	7.3	8.1	8.7	9.1	10.1	10.2
20,000	1.7	2.8	3.7	4.0	4.5	5.0	5.9	6.5	7.0	7.8	8.1
50,000	0.9	1.5	2.0	2.3	2.6	3.0	3.7	4.2	4.7	5.3	5.8
74,400	0.6	1.0	1.4	1.6	1.9	2.2	2.7	3.2	3.7	4.2	4.8

STORM STUDIES - ISOHYETAL MAP

Storm of June 10 - 15, 1935 Assignment GM 5-2
Study Prepared by: Galveston, Texas District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 14-18 September 1936

Assignment G M 5 - 7

Location Texas and Oklahoma

Study Prepared by:

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 6/26/44Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 6/14/46Remarks: Centers at
Broome, Texas and
Roosevelt, Texas**DATA AND COMPUTATIONS COMPILED****PART I**

Preliminary isohyetal map, in 1 sheet, scale 1: 1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)----- 47

Form 5001-B (24-hour " ")----- 138

Form 5001-D (" " " ")----- -

Misc. precip. records, meteorological data, etc.----- 33

Form 5002 (Mass rainfall curves)----- 85

PART II

Final isohyetal maps, in 1 sheet, scale 1: 1,000,000

Data and computation sheets:

Form S-10 (Data from mass rainfall curves)----- 5

Form S-11 (Depth-area data from isohyetal map)----- 2

Form S-12 (Maximum depth-duration data)----- 8

Maximum duration-depth-area curves----- 1

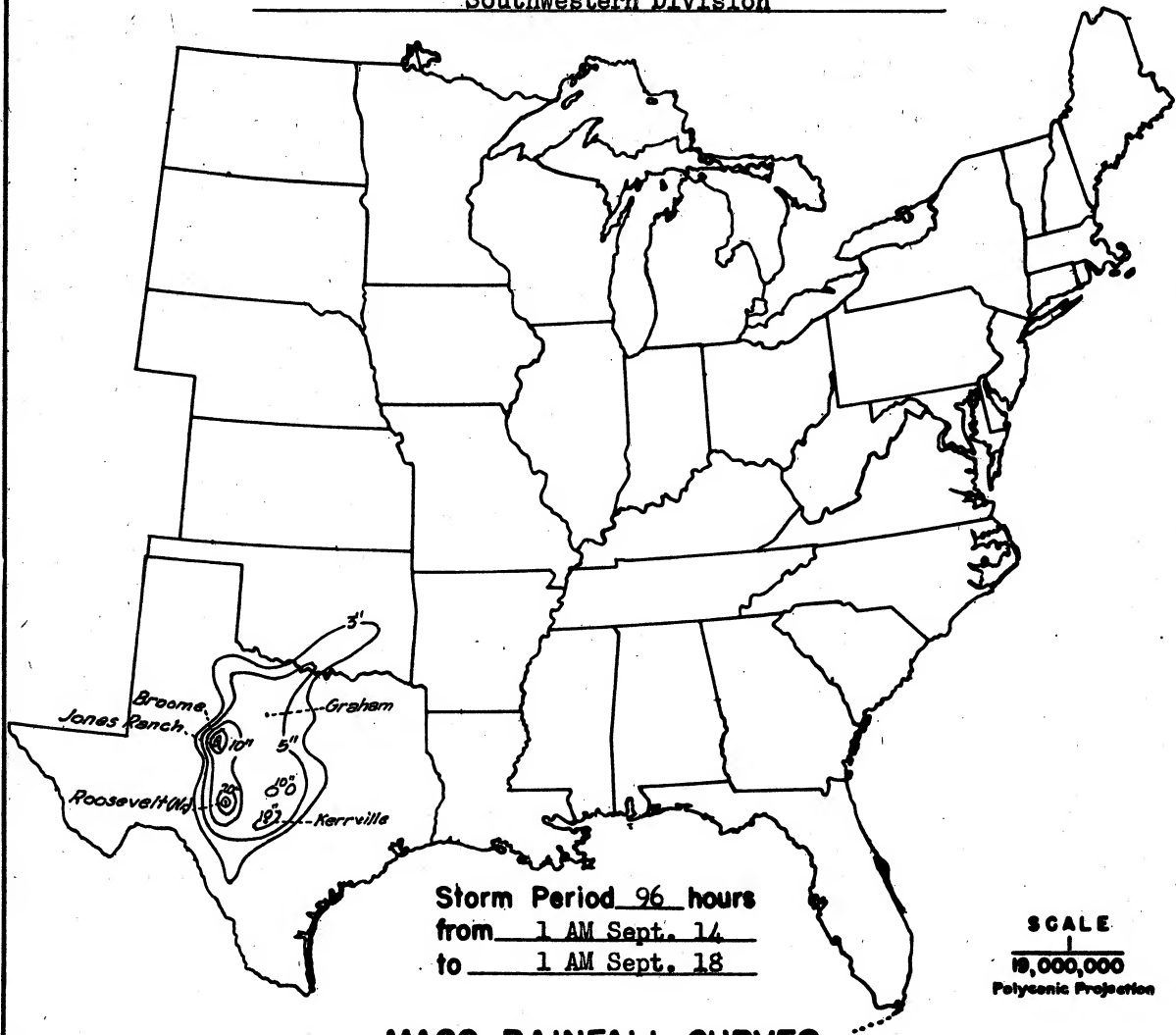
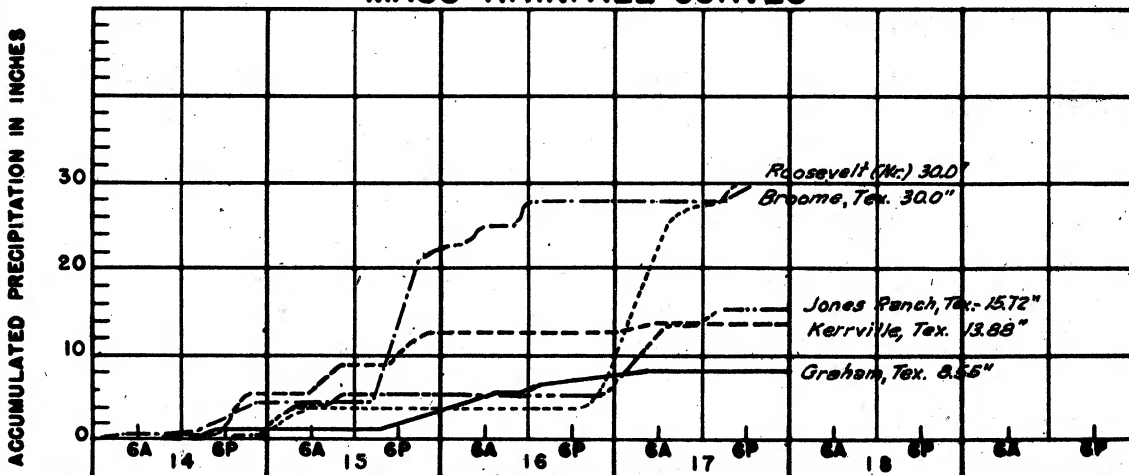
Data relating to periods of maximum rainfall----- 3

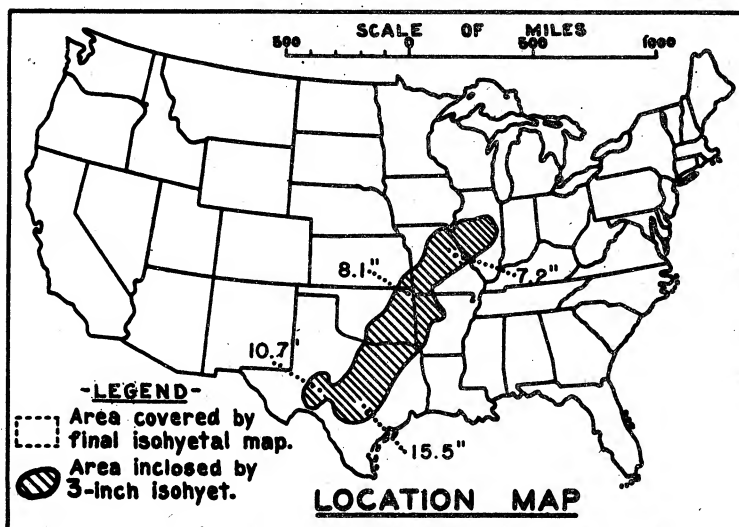
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	16.0	22.0	24.1	26.0	26.0	26.0	27.6	28.0	30.0	30.0
100	10.4	14.7	17.6	19.7	20.3	21.0	21.6	25.4	28.3	28.3
200	9.5	13.3	16.2	18.5	19.3	20.0	21.4	24.5	27.7	27.7
500	7.7	11.2	14.0	15.8	16.8	17.2	18.2	22.1	25.7	25.7
1,000	6.4	9.5	12.0	13.8	14.5	14.8	15.4	19.9	23.6	23.7
2,000	5.2	7.9	9.9	11.6	11.9	12.3	13.0	17.1	20.9	21.0
5,000	3.7	5.8	7.3	8.7	8.9	9.4	10.2	13.5	16.5	16.7
10,000	2.7	4.3	5.5	6.7	6.9	7.4	8.4	11.1	13.2	13.6
20,000	1.9	3.0	3.9	4.9	5.2	5.8	6.8	8.9	10.4	11.0
50,000	1.1	1.8	2.4	3.1	3.4	4.0	4.7	6.2	7.2	7.9
69,700	0.8	1.4	2.0	2.6	2.9	3.3	3.9	5.2	6.1	6.7

STORM STUDIES - ISOHYETAL MAP

Storm of September 14-18, 1936 Assignment GM 5-7
 Study Prepared by: Galveston, Texas District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 25 - 28 Sept. 1936

Assignment G.M. 5-8

Location Tex., Okla., Ark., Mo.,

Study Prepared by: Kan., Ill.

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of Weather Bureau, 8/27/46

Part II Approved by Office, Chief of Engineers for Distribution of Factual Data, 2/14/47

Remarks: Centers at Hillsboro and Bar "S" Ranch, Texas, Wyandotte, Okla., and Louisiana, Mo.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 3 sheets, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	44
Form 5001-B (24-hour " ")-----	137
Form 5001-D (" " " ")-----	14
Misc. precip. records, meteorological data, etc.-----	22
Form 5002 (Mass rainfall curves)-----	146

PART II

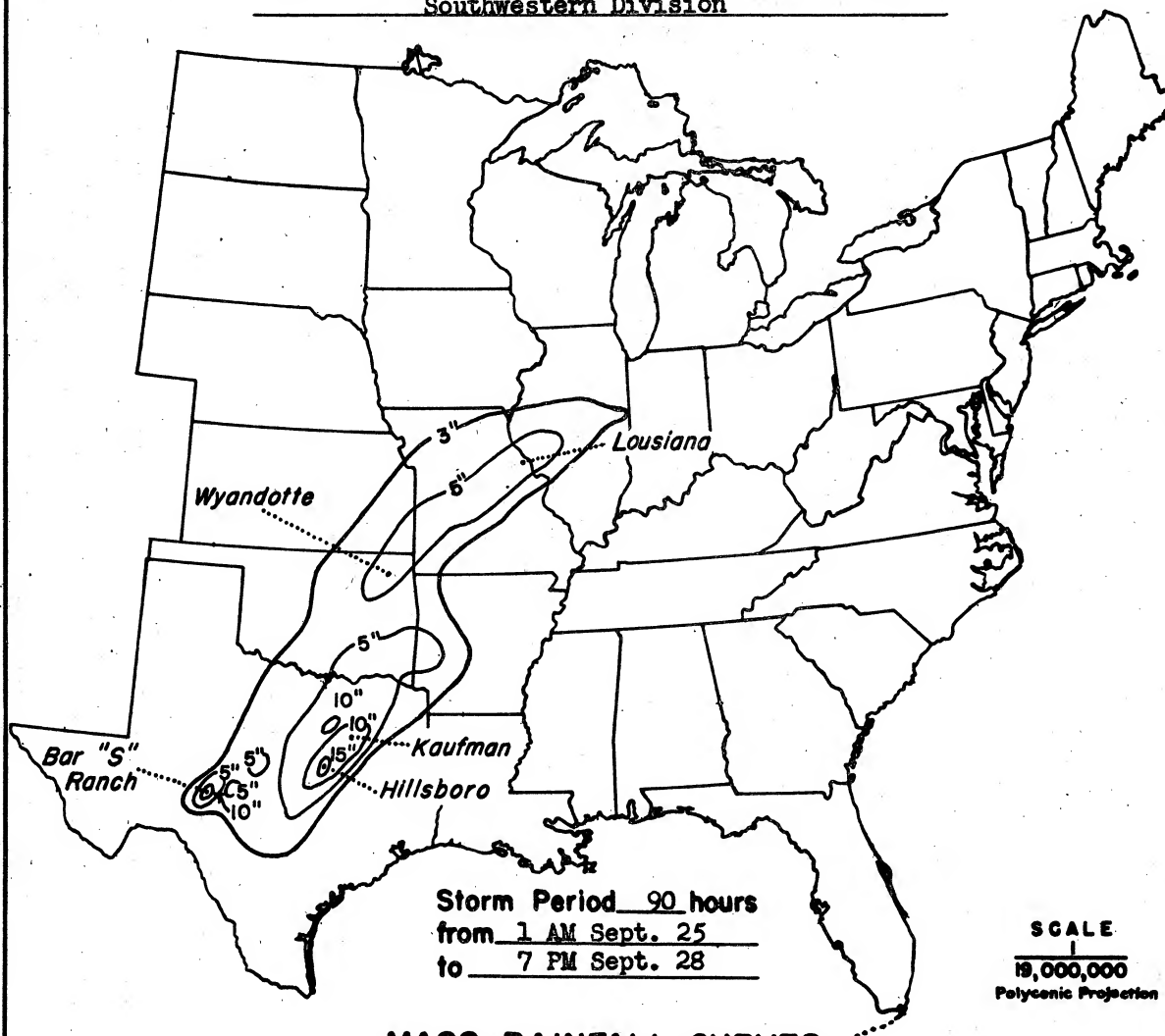
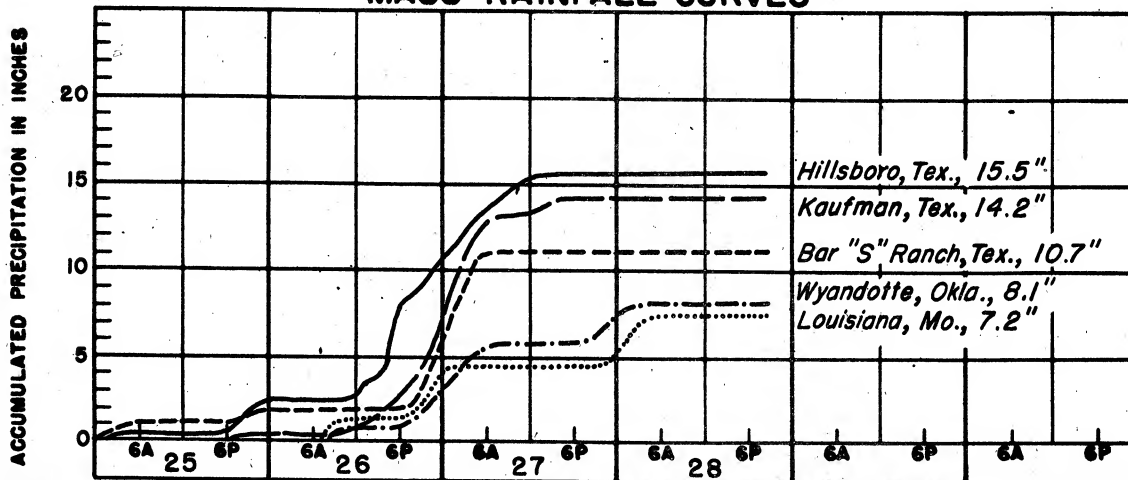
Final isohyetal maps, in 3 sheets, scale 1:1,000,000

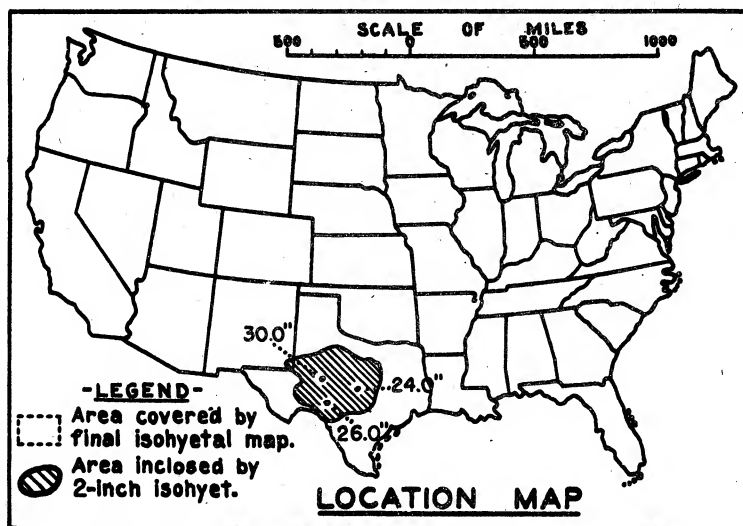
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	9
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	5
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	90	
10	6.0	10.4	11.3	13.0	13.7	14.2	15.2	15.5	15.5	
100	5.5	8.9	10.0	11.5	12.5	12.8	13.9	14.1	14.3	
200	5.3	8.5	9.5	11.0	12.1	12.3	13.3	13.6	13.8	
500	4.8	7.7	8.9	10.4	11.5	11.8	12.6	12.8	13.0	
1,000	4.3	7.0	8.4	9.9	11.1	11.3	12.0	12.3	12.4	
2,000	3.6	6.1	7.8	9.4	10.6	10.8	11.5	11.7	11.8	
5,000	2.8	5.0	6.8	8.4	9.3	9.6	10.1	10.4	10.4	
10,000	2.3	4.3	5.9	7.3	8.1	8.3	8.8	9.1	9.1	
20,000	1.9	3.6	5.1	6.3	6.9	7.1	7.5	7.9	7.9	
50,000	1.5	2.8	4.0	4.8	5.4	5.6	5.9	6.2	6.3	
100,000	1.2	2.2	3.1	3.8	4.3	4.6	4.9	5.1	5.4	
157,000	1.0	1.9	2.6	3.2	3.8	4.0	4.3	4.5	4.9	

STORM STUDIES - ISOHYETAL MAPStorm of September 25-28, 1936 Assignment GM 5-8Study Prepared by: Galveston, Texas DistrictSouthwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of 19-25 July 1938

Assignment GM 5-10

Location Texas

Study Prepared by:

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 10/31/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 9/30/46

Remarks: Centers near

Eldorado, Texas

Rocksprings, Texas

San Saba, Texas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	23
Form 5001-B (24-hour " " " ")-----	32
Form 5001-D (" " " " ")-----	15
Misc. precip. records, meteorological data, etc.-----	32
Form 5002 (Mass rainfall curves)-----	78

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

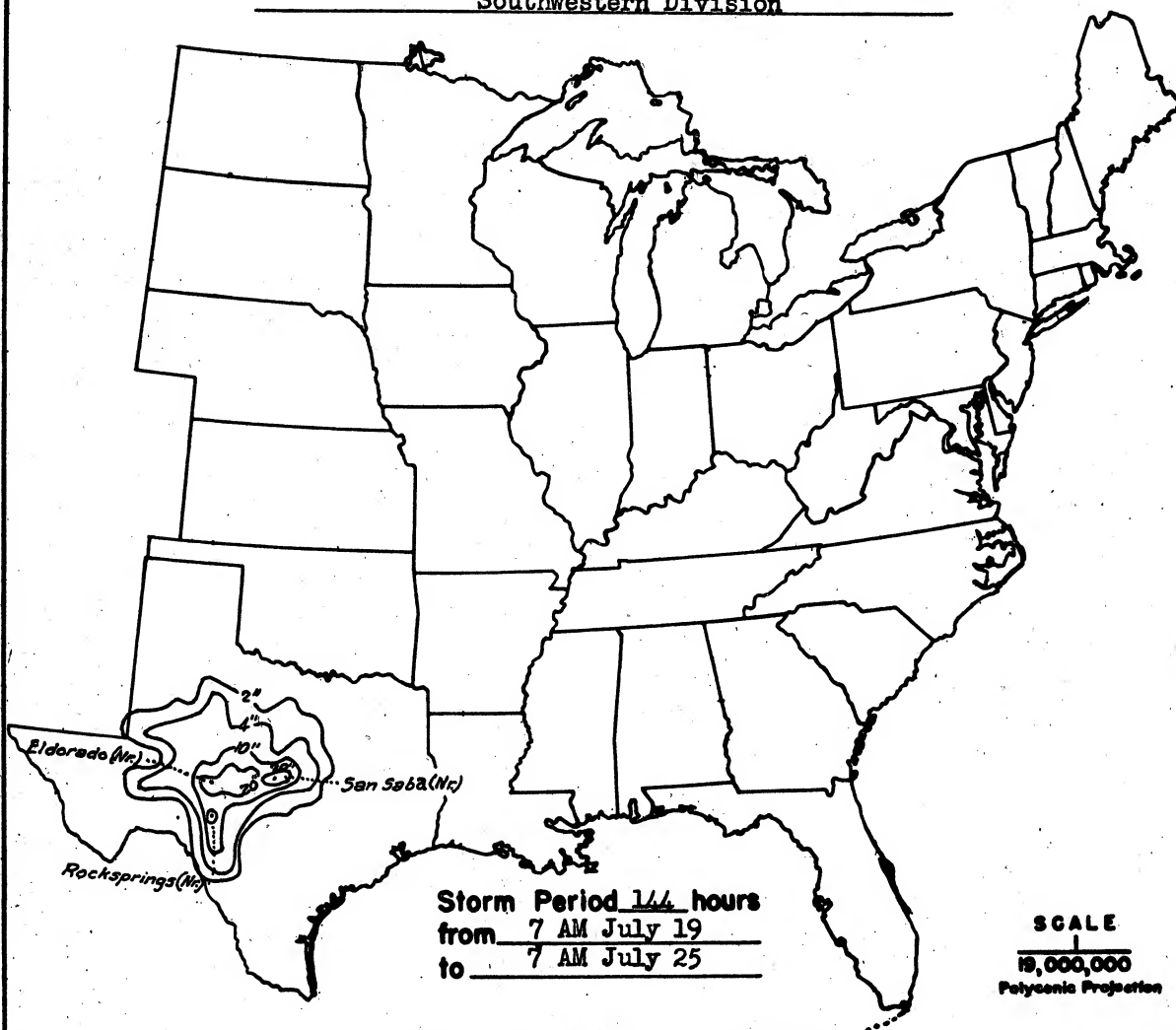
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	10
Form S-11 (Depth-area data from isohyetal map)-----	4
Form S-12 (Maximum depth-duration data)-----	17
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

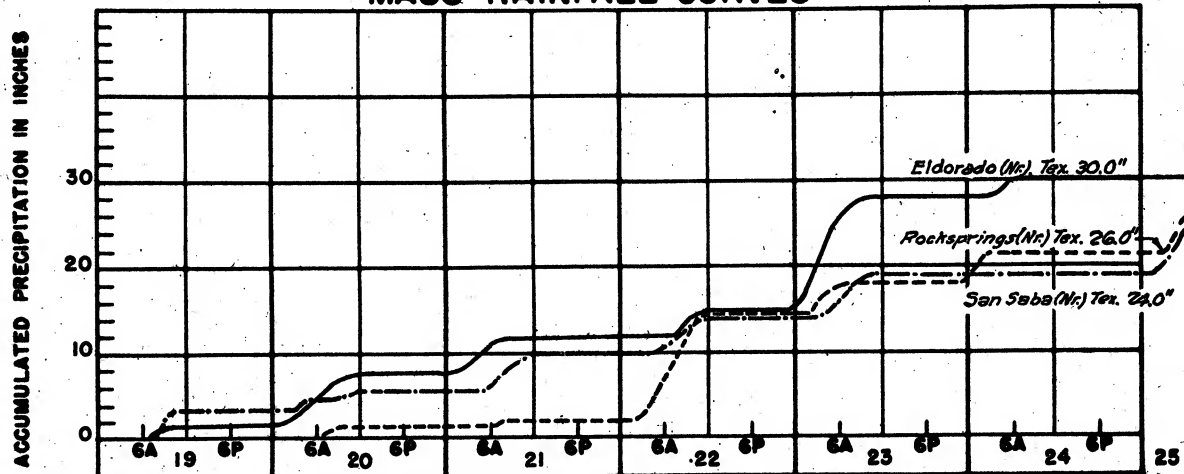
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

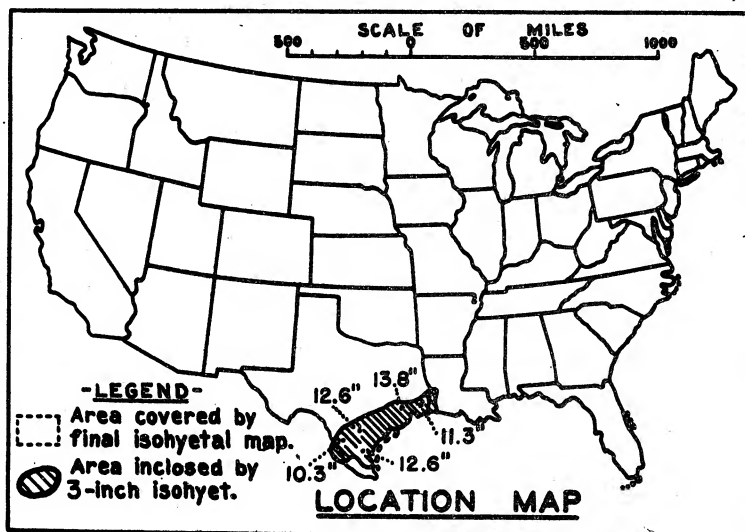
Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	144
10	11.5	13.4	13.4	15.9	16.0	16.0	18.0	20.0	22.6	27.8	30.0
100	9.4	10.0	10.5	12.5	13.3	13.4	15.1	16.9	19.1	22.9	25.2
200	8.4	9.0	9.5	11.2	12.3	12.6	14.3	16.5	18.8	22.2	24.3
500	7.0	7.5	8.1	9.3	11.0	11.4	13.1	15.5	18.1	20.9	23.1
1,000	6.0	6.5	6.9	7.9	10.0	10.5	11.9	14.6	17.1	19.6	21.9
2,000	5.0	5.5	5.9	6.7	9.0	9.6	10.7	13.5	15.3	17.8	20.6
5,000	3.7	4.4	4.7	5.4	7.6	8.2	8.9	11.6	12.7	15.0	18.2
10,000	2.9	3.6	3.8	4.4	6.6	7.0	7.5	9.9	10.5	12.3	15.4
20,000	2.2	2.8	3.0	3.4	5.1	5.5	5.9	7.8	8.2	9.7	12.0
50,000	1.3	1.7	1.8	2.1	3.1	3.3	3.7	4.8	5.0	6.2	7.4
68,000	1.0	1.3	1.4	1.6	2.3	2.6	2.9	3.7	3.9	4.9	6.1

STORM STUDIES - ISOHYETAL MAP

Storm of July 19 - 25, 1938Assignment GM 5-10Study Prepared by: Galveston, Texas District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of 2-6 July 1942

Assignment CM 5-12

Location Southeastern Texas

Study Prepared by:

Southwestern Division
Galveston District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 7/26/45Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 12/30/46Remarks: Centers at
Spring Branch, McQueeny
Alice, Beaumont and Baylor
Ranch, Texas.**DATA AND COMPUTATIONS COMPILED****PART I**Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves:

(Number of Sheets)

Form 5001-C (Hourly precip. data)-----	43
Form 5001-B (24-hour " ")-----	59
Form 5001-D (" " " ")-----	—
Misc. precip. records, meteorological data, etc.-----	11
Form 5002 (Mass rainfall curves)-----	59

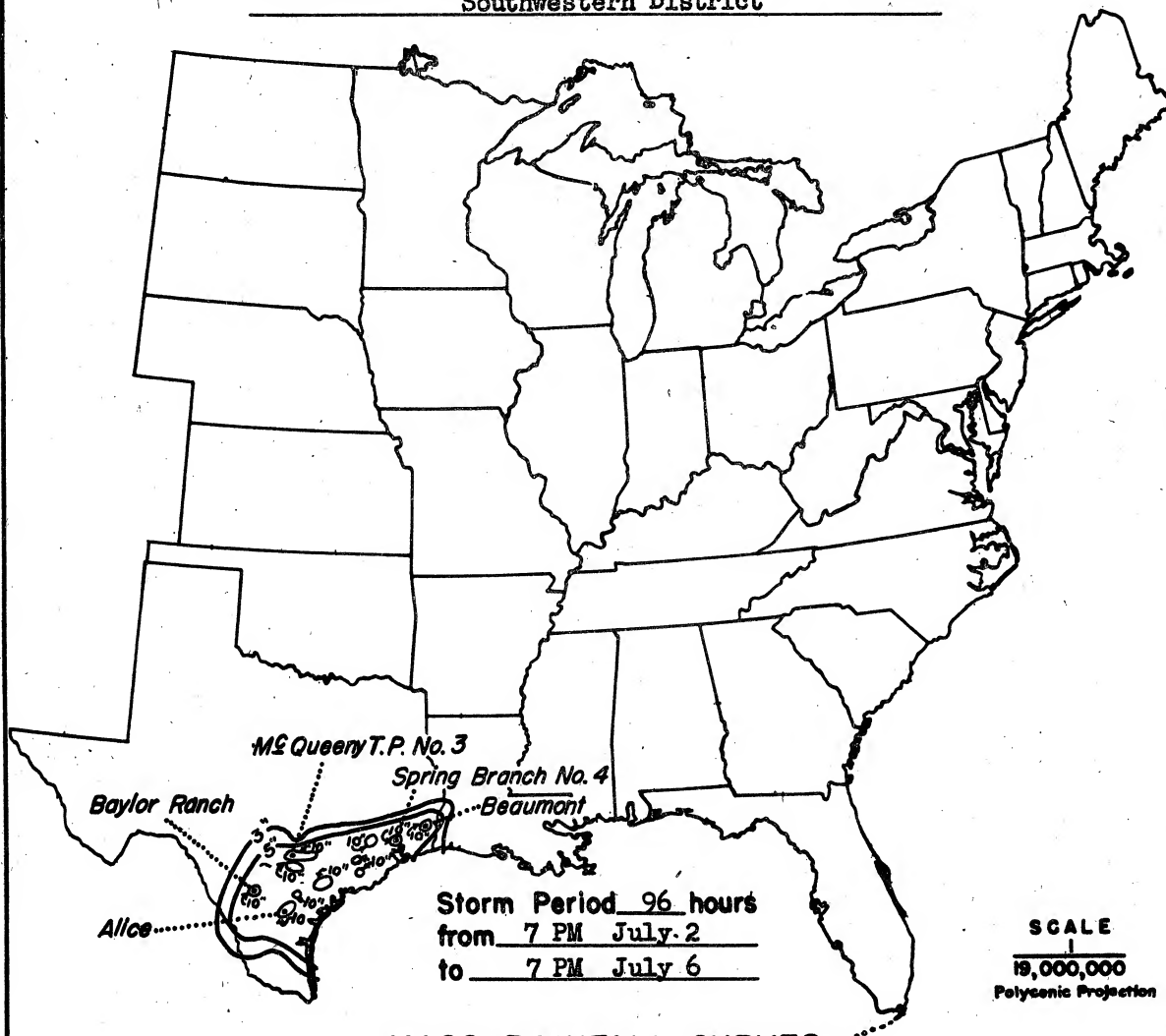
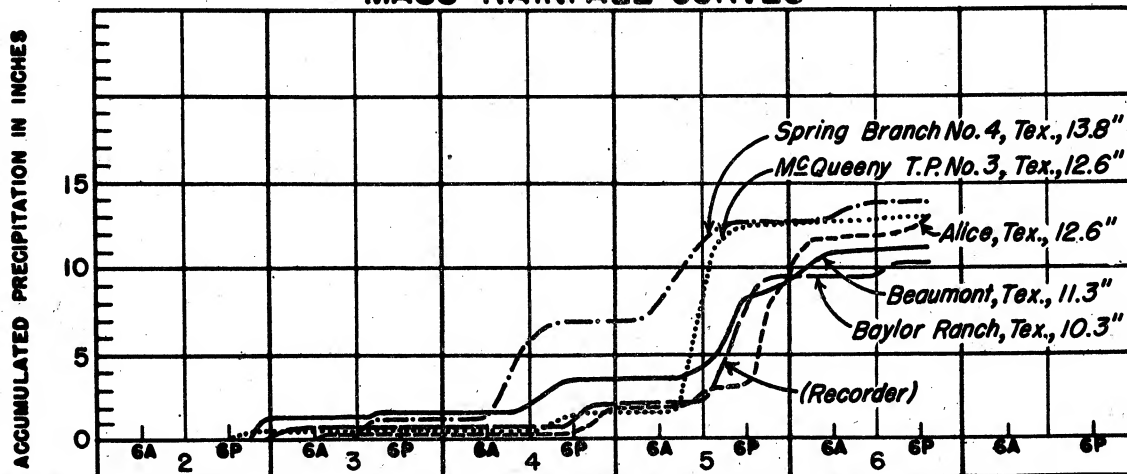
PART IIFinal isohyetal maps, in 1 sheet, scale 1:1,000,000

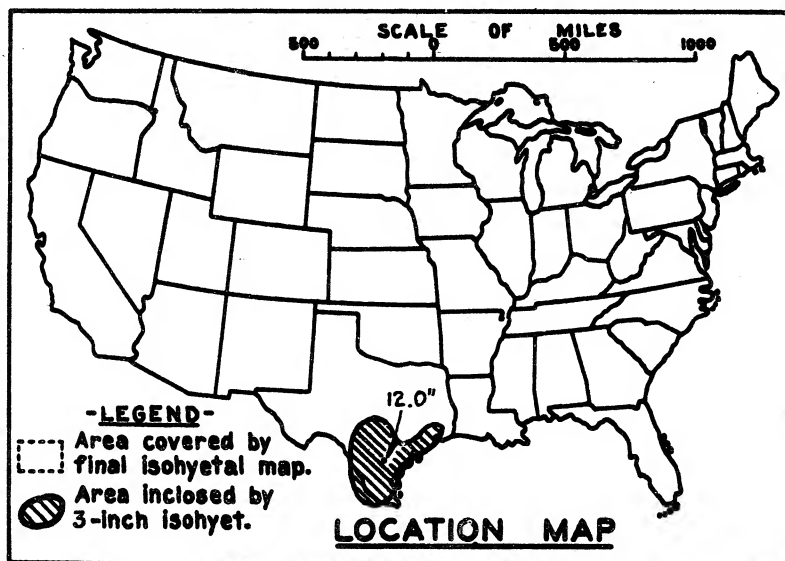
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	4
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	72	96
10	9.7	10.0	10.0	10.3	11.6	11.6	11.6	12.3	13.8	13.8
100	6.7	7.8	8.6	8.9	9.8	10.4	10.6	11.9	12.3	12.9
200	6.0	7.2	8.0	8.4	9.2	9.9	10.2	11.6	11.9	12.5
500	5.2	6.4	7.2	7.6	8.3	9.1	9.5	10.9	11.3	12.0
1,000	4.7	5.8	6.6	6.9	7.6	8.5	9.0	10.4	10.8	11.5
2,000	4.1	5.2	6.0	6.3	7.0	7.9	8.5	9.9	10.3	11.0
5,000	3.3	4.3	5.9	5.4	6.0	7.0	7.7	9.1	9.5	10.3
10,000	2.7	3.6	4.3	4.7	5.3	6.2	7.2	8.6	9.0	9.8
20,000	2.0	2.9	3.6	4.0	4.6	5.3	6.3	7.7	8.2	8.9
50,000	1.2	1.9	2.5	2.8	3.5	4.0	5.0	6.0	6.3	7.0
52,800	1.1	1.8	2.4	2.7	3.4	3.9	4.9	5.8	6.1	6.7

STORM STUDIES - ISOHYETAL MAPStorm of July 2-6, 1942Assignment GM 5-12Study Prepared by: Galveston, Texas District
Southwestern District**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 14-15, 1919
 Assignment G M 5 - 15 A
 Location Southern Texas
 Study Prepared by:
 Southwestern Division
 Galveston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/23/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 3/7/44

Remarks: Centers at :
 George West, Rossville and
 Alice, Texas

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 2,500,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	12
Form 5001-B (24-hour " ")-----	55
Form 5001-D (" " " ")-----	-
Miscl. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	39

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

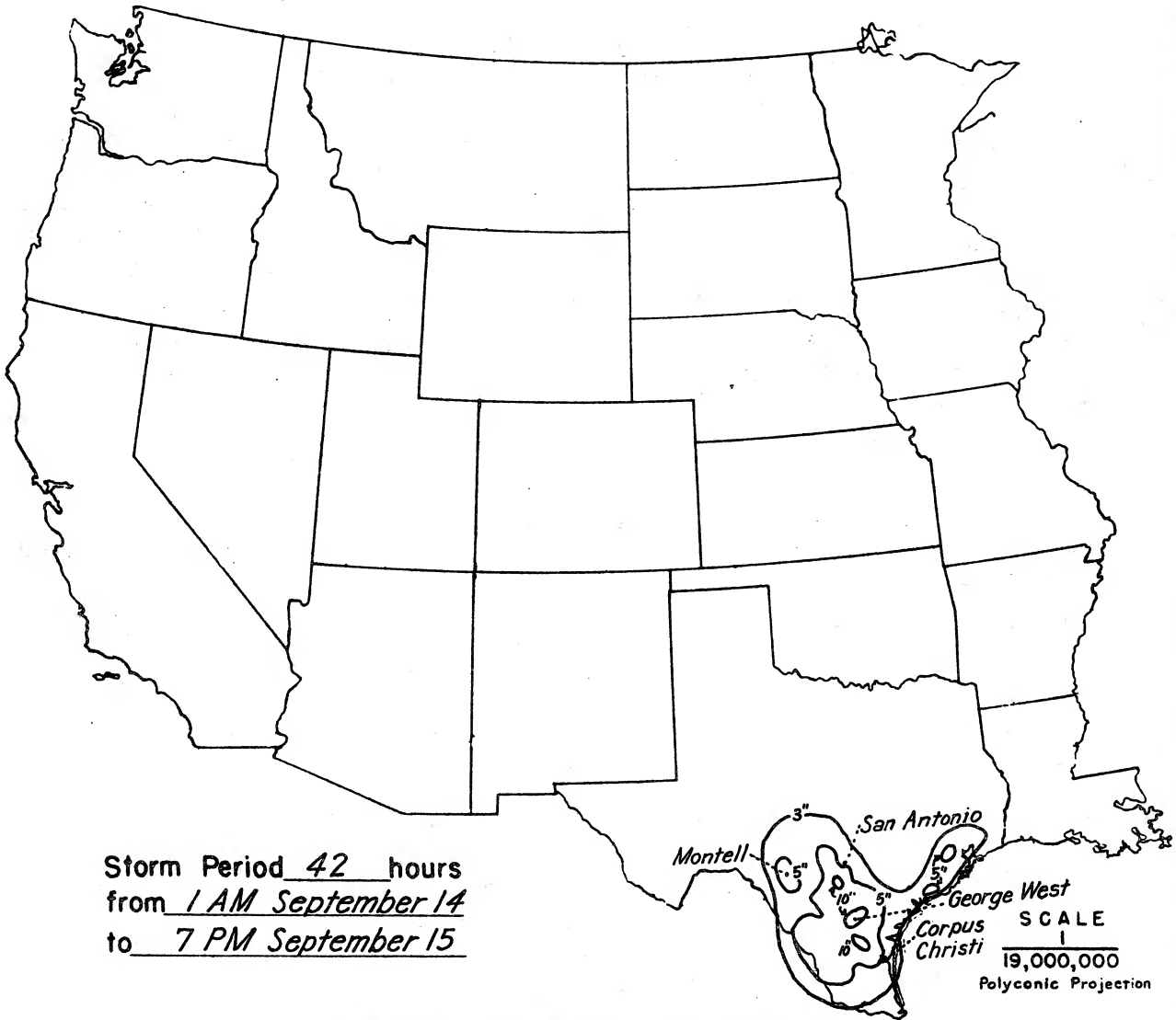
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	2
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	16
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

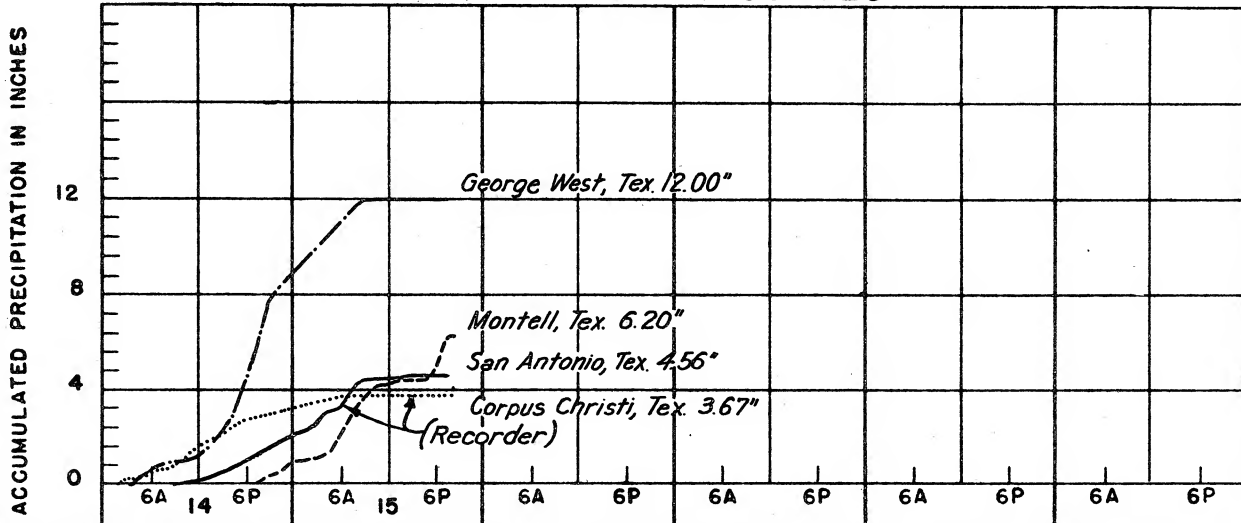
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

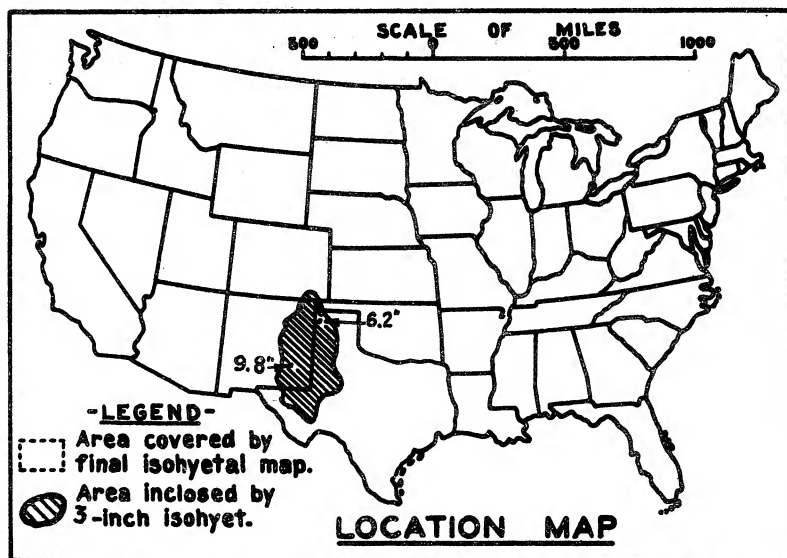
Area in Sq. Mi.	Duration of Rainfall in Hours											
	6	12	18	24	30	36	42					
10	7.0	8.9	10.0	11.0	11.9	12.0	12.0					
100	6.5	8.5	9.6	10.5	11.5	11.6	11.6					
200	6.3	8.2	9.4	10.4	11.3	11.4	11.4					
500	5.8	7.8	9.1	10.1	11.0	11.1	11.1					
1,000	5.4	7.3	8.8	9.8	10.6	10.6	10.7					
2,000	4.9	6.8	8.4	9.5	10.2	10.2	10.3					
5,000	4.1	5.9	7.7	8.8	9.4	9.5	9.5					
10,000	3.4	5.1	7.0	8.1	8.5	8.6	8.7					
20,000	2.5	4.2	6.0	6.9	7.2	7.4	7.5					
40,000	1.9	3.2	4.8	5.5	5.8	6.0	6.1					
50,000	1.6	2.9	4.4	5.0	5.4	5.5	5.6					
60,000	1.4	2.6	3.9	4.5	4.9	5.1	5.2					

STORM STUDIES - ISOHYETAL MAP

Storm of September 14-15, 1919 Assignment GM 5-15AStudy Prepared by: Galveston, Texas District
Southwestern Division.

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of September 15-17, 1919

Assignment G M 5 - 15 B

Location New Mexico and Texas

Study Prepared by:

Southwestern Division
Galveston District OfficePart I Reviewed by H. M. Sec. of
Weather Bureau, 5/24/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/27/44

Remarks: Centers at ;

Meek, N.Mex., & Romero, Tex.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1 : 1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	12
Form 5001-B (24-hour " ")-----	55
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	1
Form 5002 (Mass rainfall curves)-----	39

PART II

Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000

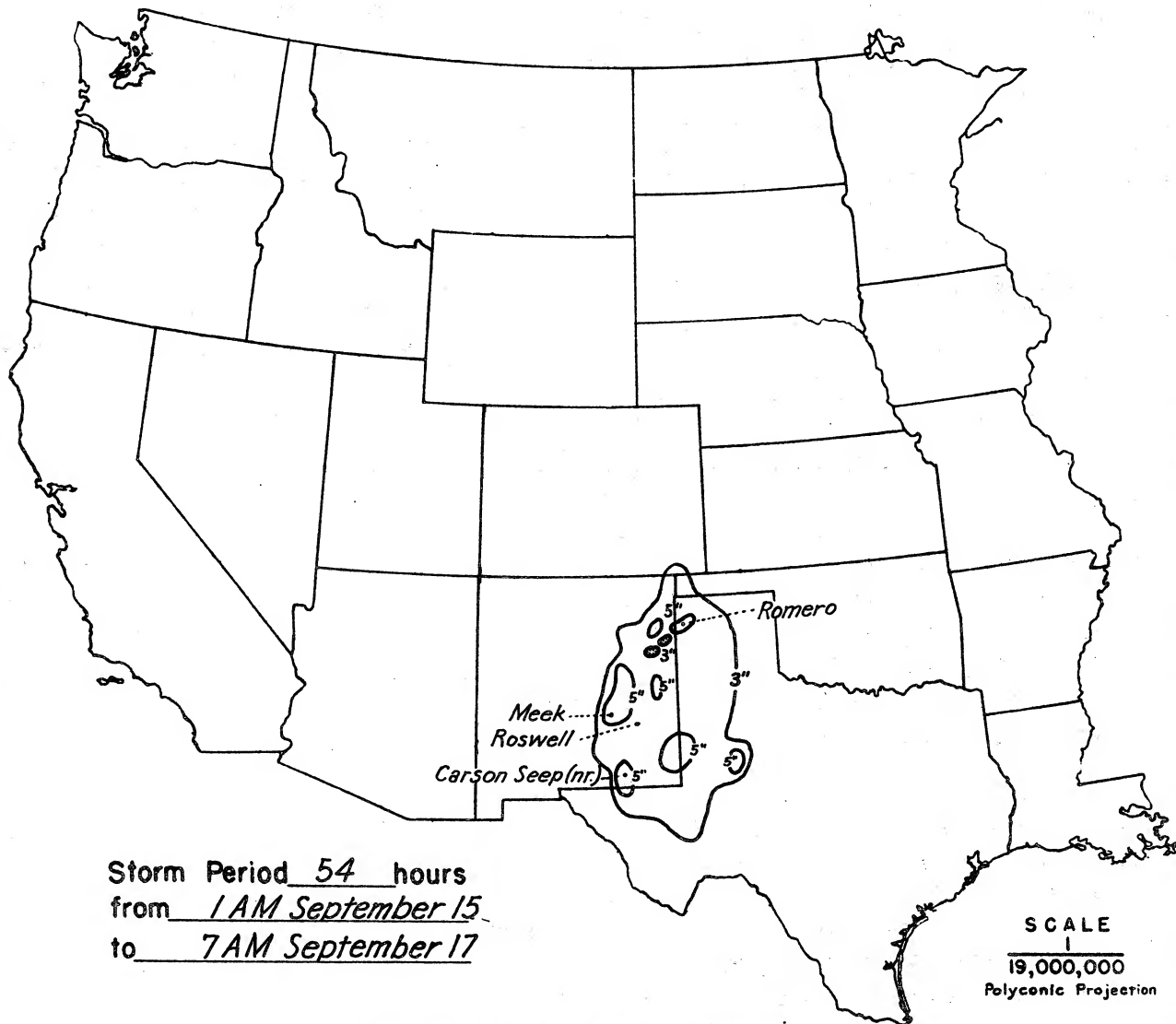
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	3
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	11
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	3

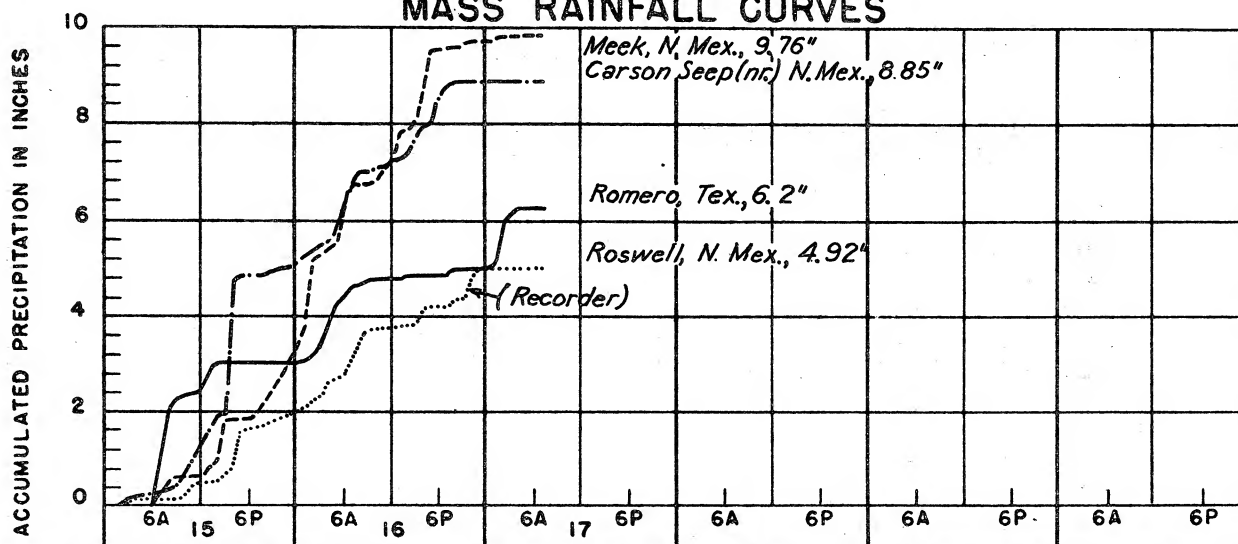
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

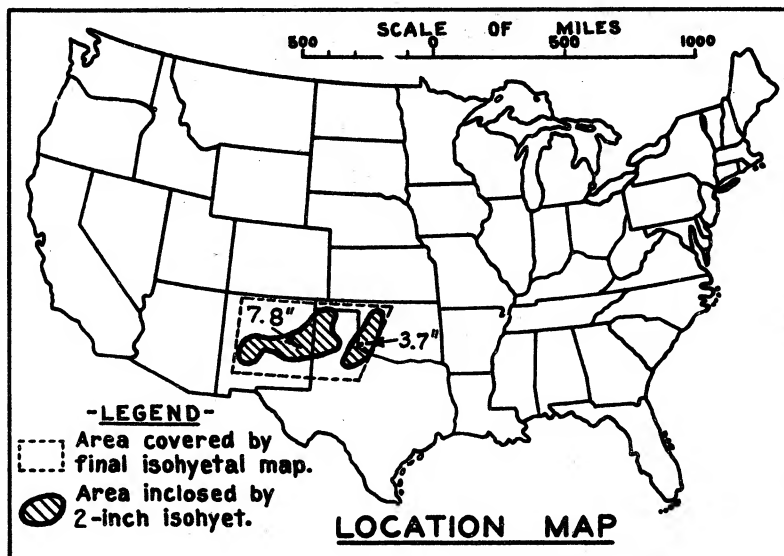
Area in Sq. Mi.	Duration of Rainfall in Hours								
	6	12	18	24	30	36	48	54	
Max. Station	4.0	4.6	6.5	7.7	8.8	9.4	9.8	9.8	
10	3.8	4.5	6.2	7.4	8.5	9.1	9.5	9.5	
100	3.2	4.2	5.1	6.4	7.3	7.9	8.3	8.3	
200	3.0	4.1	4.7	6.0	6.9	7.5	7.9	7.9	
500	2.7	3.8	4.3	5.4	6.3	7.0	7.3	7.3	
1,000	2.5	3.4	4.0	5.0	5.8	6.5	6.9	6.9	
2,000	2.2	3.1	3.6	4.6	5.4	6.0	6.5	6.5	
5,000	1.9	2.7	3.2	4.0	4.8	5.3	5.9	6.0	
10,000	1.6	2.4	2.9	3.6	4.3	4.8	5.5	5.6	
20,000	1.3	2.0	2.5	3.1	3.8	4.3	5.1	5.2	
40,000	1.0	1.7	2.2	2.7	3.4	3.8	4.7	4.8	
50,000	0.9	1.6	2.1	2.6	3.2	3.7	4.6	4.7	
75,000	0.8	1.4	1.9	2.3	3.0	3.4	4.3	4.4	

STORM STUDIES - ISOHYETAL MAP

Storm of September 15-17, 1919 Assignment GM 5-15-BStudy Prepared by: Galveston, Texas District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 26-30, 1937
 Assignment GM 5-17
 Location New Mexico and Texas
 Study Prepared by:
 Southwestern Division
 Galveston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/24/43
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 10/28/43

Remarks: Center at;
 Ragland, N.Mex.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 2 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	11
Form 5001-B (24-hour " ")-----	74
Form 5001-D (" " " ")-----	-
Misc. precip. records, meteorological data, etc.-----	2
Form 5002 (Mass rainfall curves)-----	46

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

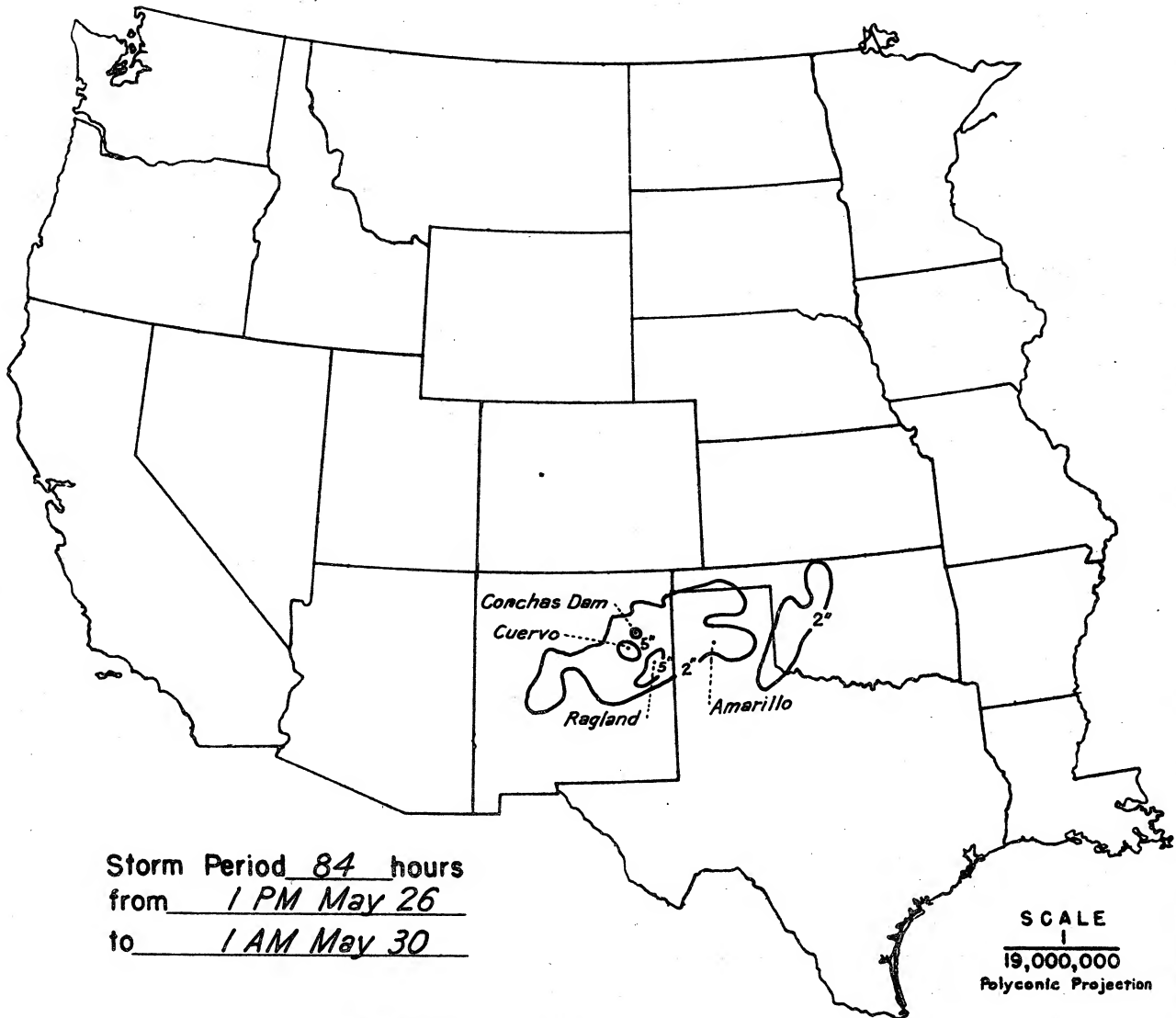
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	17
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

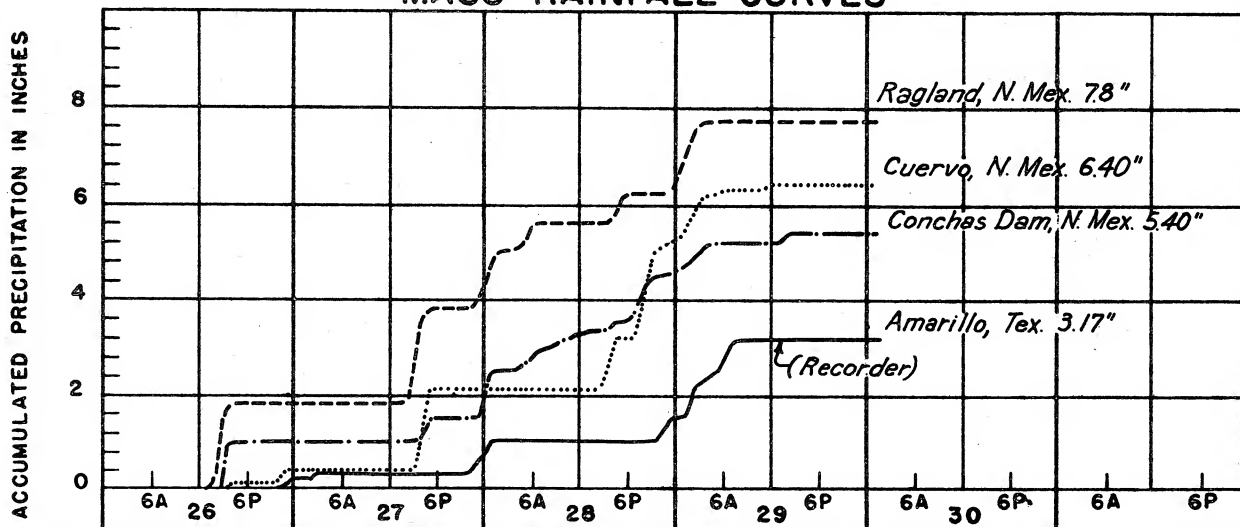
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

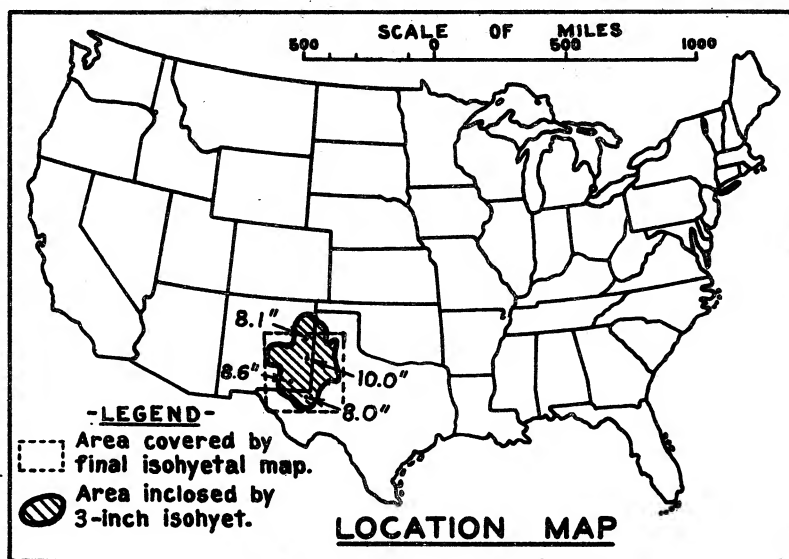
Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	84	
10	2.8	3.9	4.3	4.4	4.6	5.8	6.0	7.4	7.8	
100	2.0	3.3	3.9	4.1	4.3	5.1	5.7	6.4	7.2	
200	1.8	3.1	3.8	4.0	4.2	4.8	5.5	6.1	6.9	
500	1.6	2.7	3.4	3.7	4.0	4.5	5.2	5.7	6.5	
1,000	1.4	2.4	3.0	3.3	3.8	4.2	4.9	5.3	6.1	
2,000	1.3	2.1	2.7	3.0	3.5	3.9	4.6	4.9	5.7	
5,000	1.0	1.8	2.2	2.5	3.1	3.4	4.0	4.4	5.1	
10,000	0.9	1.5	1.9	2.2	2.7	3.0	3.5	3.9	4.6	
20,000	0.7	1.2	1.5	1.8	2.2	2.5	3.0	3.3	3.9	
37,000	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.2	

STORM STUDIES - ISOHYETAL MAP

Storm of May 26-30, 1937 Assignment GM-5-17Study Prepared by: Galveston Texas District
Southwestern Division

MASS RAINFALL CURVES



STORM STUDIES - PERTINENT DATA SHEET

Storm of May 20-25, 1941

Assignment GM 5-18

Location Texas and New Mexico

Study Prepared by:

Southwestern Division

Galveston District Office

Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/18/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 2/18/44

Remarks: Center at

Prairieview, New Mexico

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	76
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	26
Misc. precip. records, meteorological data, etc. (Hydrologic Network Special Supp.)-----	10
Form 5002 (Mass rainfall curves)-----	78

PART II

Final isohyetal maps, in 1 sheet, scale 1:1,000,000

Data and computation sheets:

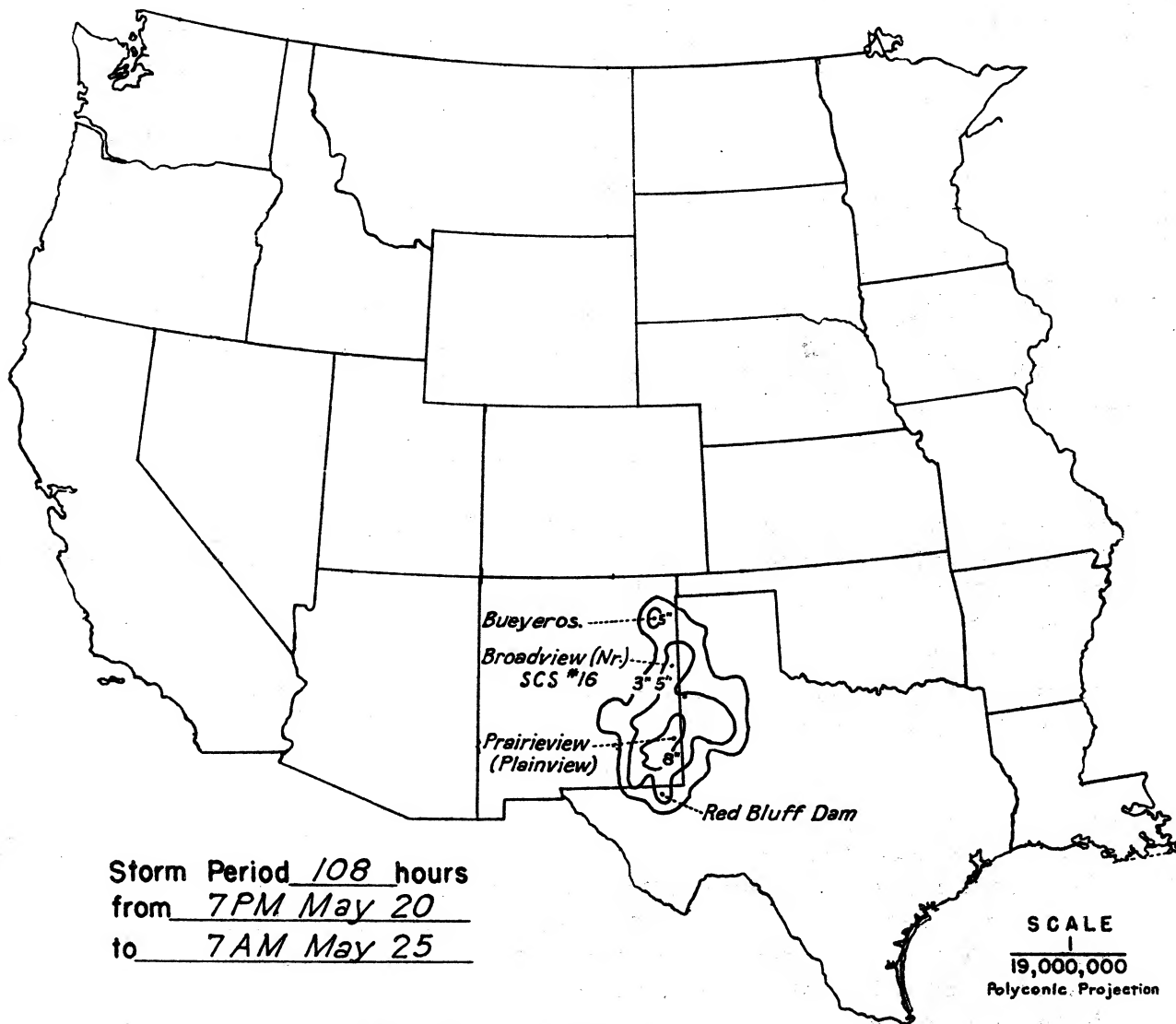
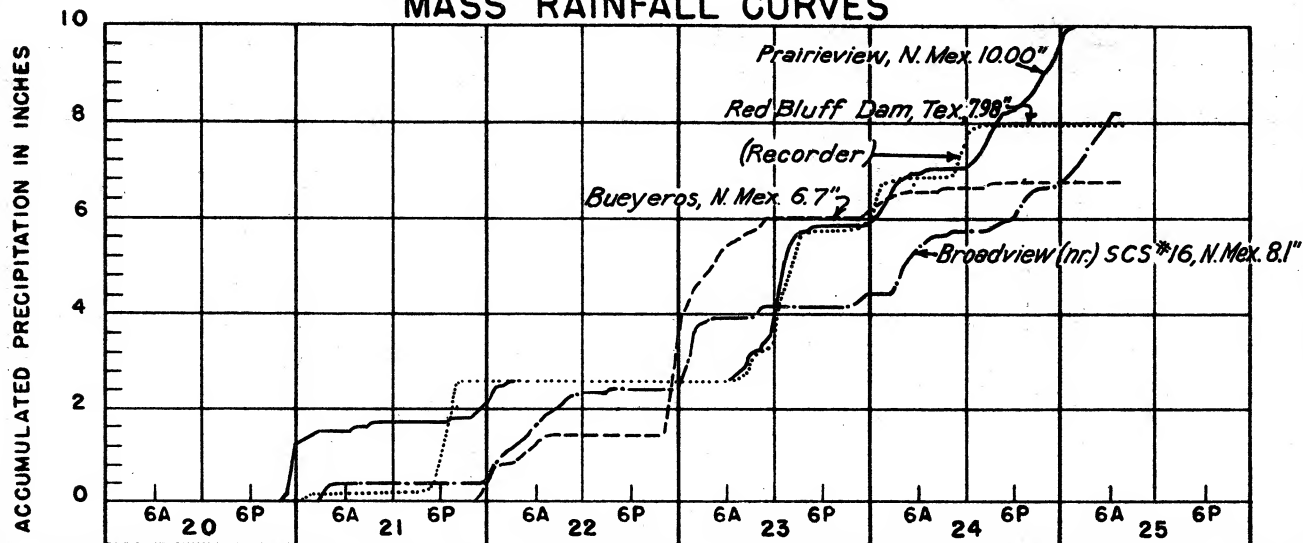
Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	15
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

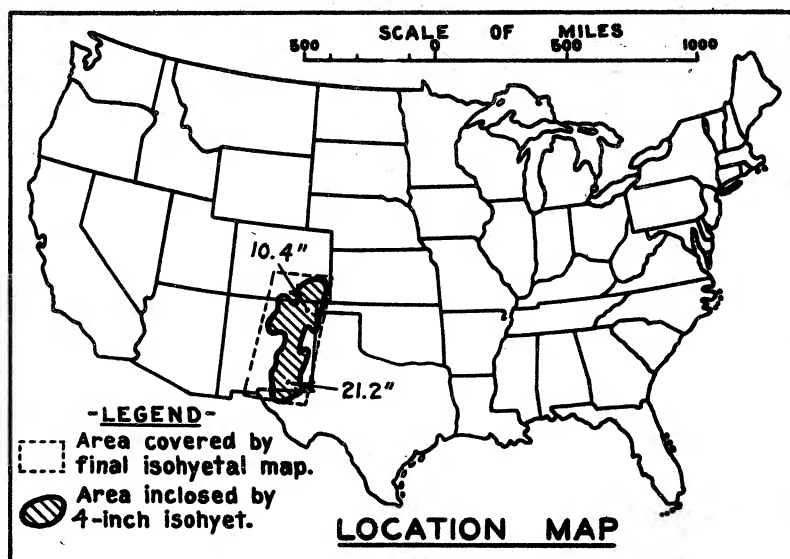
MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours										
	6	12	18	24	30	36	48	60	72	96	108
10	3.8	4.8	6.0	6.5	6.9	7.0	7.4	7.4	8.4	9.3	10.0
100	3.0	4.0	5.2	6.3	6.7	6.8	6.9	7.0	8.1	9.0	9.6
200	2.7	3.7	4.7	6.0	6.4	6.6	6.7	6.9	8.0	8.8	9.5
500	2.3	3.3	4.1	5.4	5.8	6.1	6.4	6.7	7.7	8.6	9.2
1,000	2.1	3.0	3.7	4.9	5.3	5.7	6.1	6.4	7.5	8.4	9.0
2,000	1.8	2.7	3.2	4.3	4.7	5.2	5.7	6.1	7.2	8.1	8.7
5,000	1.4	2.2	2.7	3.5	3.9	4.4	5.0	5.6	6.6	7.6	8.2
10,000	1.2	1.9	2.2	2.9	3.2	3.7	4.4	5.0	5.9	7.0	7.6
20,000	0.9	1.5	1.8	2.3	2.6	3.0	3.7	4.3	5.1	6.2	6.7
44,000	0.6	1.1	1.3	1.5	1.8	2.1	2.7	3.4	3.9	4.9	5.2

STORM STUDIES - ISOHYETAL MAP

Storm of May 20-25, 1941 Assignment GM 5-18
Study Prepared by: Galveston, Tex., District
Southwestern Division

**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of September 20-23, 1941

Assignment GM 5-19

Location New Mexico

Study Prepared by:

Southwestern Division,
Galveston District Office.Part I Reviewed by H. M. Sec. of
Weather Bureau, 7/9/43Part II Approved by Office, Chief
of Engineers for Distribution
of Factual Data, 3/27/44

Remarks: Center at

Dave McColiseum Ranch, N. Mex.

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1:1,000,000

Precipitation data and mass curves: (Number of Sheets)

Form 5001-C (Hourly precip. data)-----	64
Form 5001-B (24-hour " ")-----	-
Form 5001-D (" " " ")-----	26
Misc. precip. records, meteorological data, etc.-----	19
Form 5002 (Mass rainfall curves)-----	76

PART II

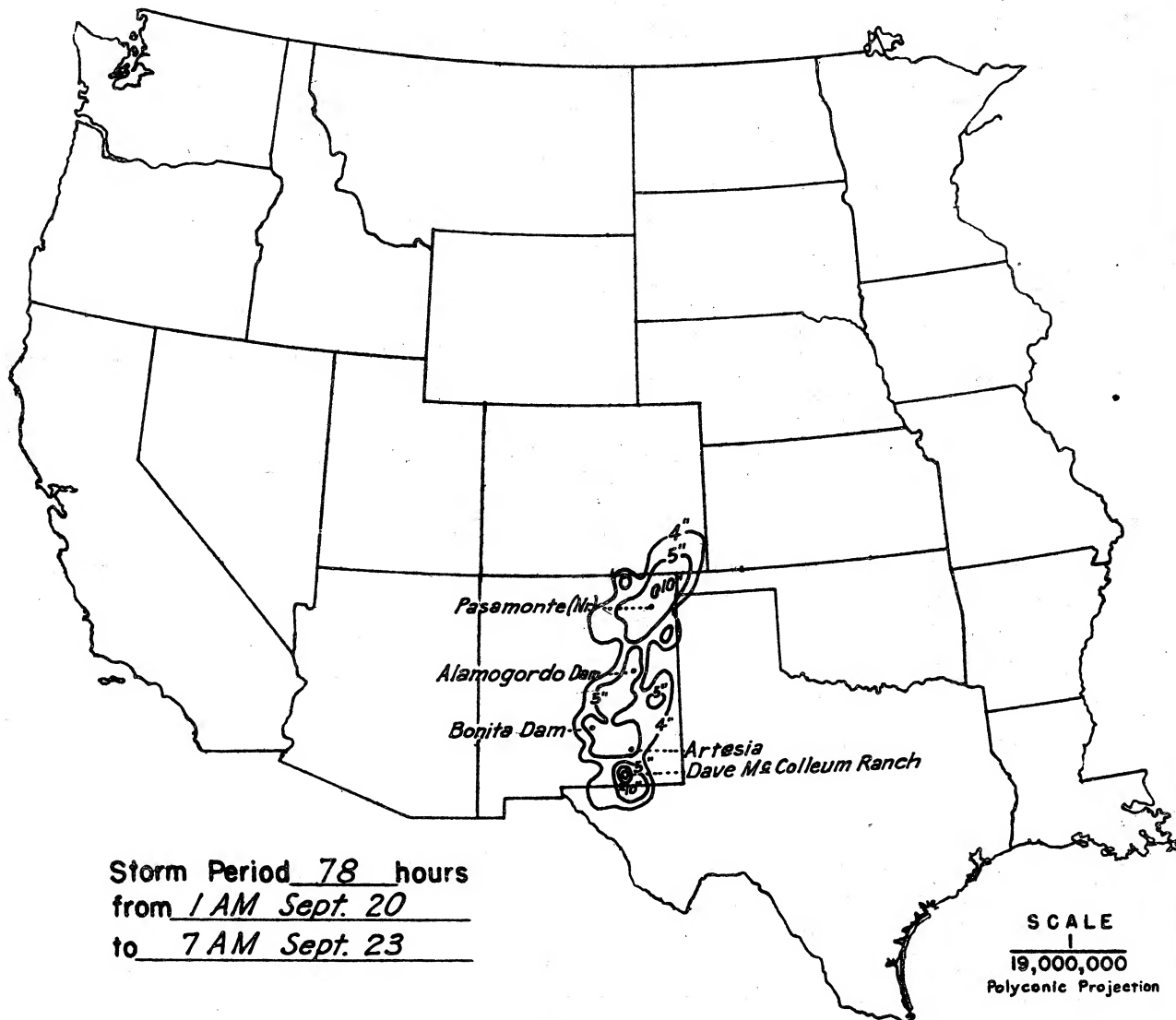
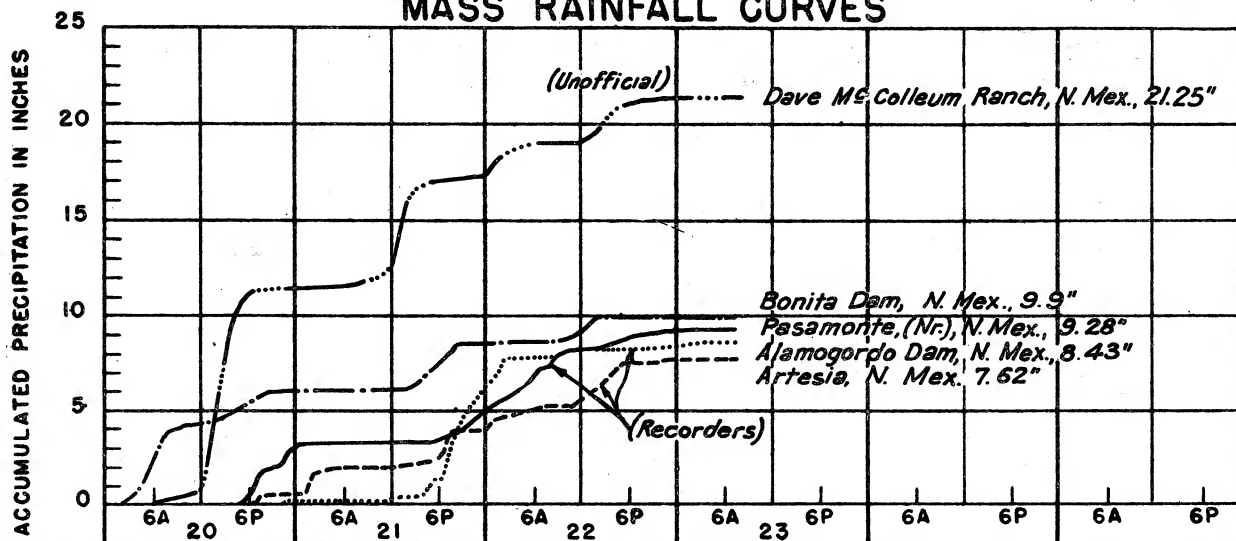
Final isohyetal maps, in 1 sheet, scale 1:1,000,000

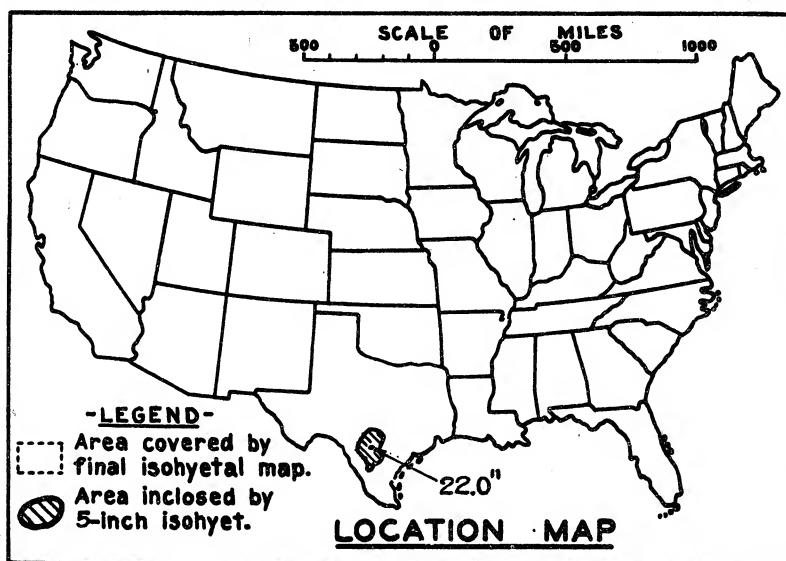
Data and computation sheets:

Form S-10 (Data from mass rainfall curves)-----	4
Form S-11 (Depth-area data from isohyetal map)-----	2
Form S-12 (Maximum depth-duration data)-----	18
Maximum duration-depth-area curves-----	1
Data relating to periods of maximum rainfall-----	2

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	6	12	18	24	30	36	48	60	78	
10	10.1	11.2	11.5	12.1	16.3	16.9	18.7	21.0	21.2	
100	5.9	8.3	8.7	9.0	10.1	11.7	13.0	14.7	15.0	
200	5.2	7.3	7.8	8.1	8.4	9.7	10.8	12.4	12.7	
500	4.4	6.2	6.8	6.9	7.2	7.9	9.1	10.2	10.5	
1,000	3.8	5.5	6.1	6.3	6.4	7.1	8.3	9.4	9.6	
2,000	3.3	4.8	5.5	5.6	5.8	6.4	7.5	8.6	8.8	
5,000	2.6	3.9	4.6	4.8	5.1	5.6	6.6	7.5	7.8	
10,000	2.0	3.2	4.0	4.2	4.5	4.9	5.9	6.7	7.0	
20,000	1.5	2.6	3.3	3.7	4.0	4.4	5.2	5.9	6.2	
38,000	1.1	2.0	2.7	3.2	3.6	3.9	4.6	5.4	5.5	

STORM STUDIES - ISOHYETAL MAPStorm of September 20-23, 1941 Assignment GM 5-19Study Prepared by: Galveston, Tex., District
Southwestern Division**MASS RAINFALL CURVES**

STORM STUDIES - PERTINENT DATA SHEET

Storm of May 31, 1935
 Assignment G M 5 - 20
 Location Southwestern Texas
 Study Prepared by:
 Southwestern Division
 Galveston District Office

Part I Reviewed by H. M. Sec. of
 Weather Bureau, 5/8/44
 Part II Approved by Office, Chief
 of Engineers for Distribution
 of Factual Data, 2/27/45
 Remarks: Center at : *Tular*
 Woodward Ranch, New Mexico

DATA AND COMPUTATIONS COMPILED**PART I**

Preliminary isohyetal map, in 1 sheet, scale 1 : 1,000,000
 Precipitation data and mass curves: (Number of Sheets)
 Form 5001-C (Hourly precip. data)----- 4
 Form 5001-B (24-hour " ")----- -
 Form 5001-D (" " " ")----- 4
 Misc. precip. records, meteorological data, etc.----- 1
 Form 5002 (Mass rainfall curves)----- 10

PART II

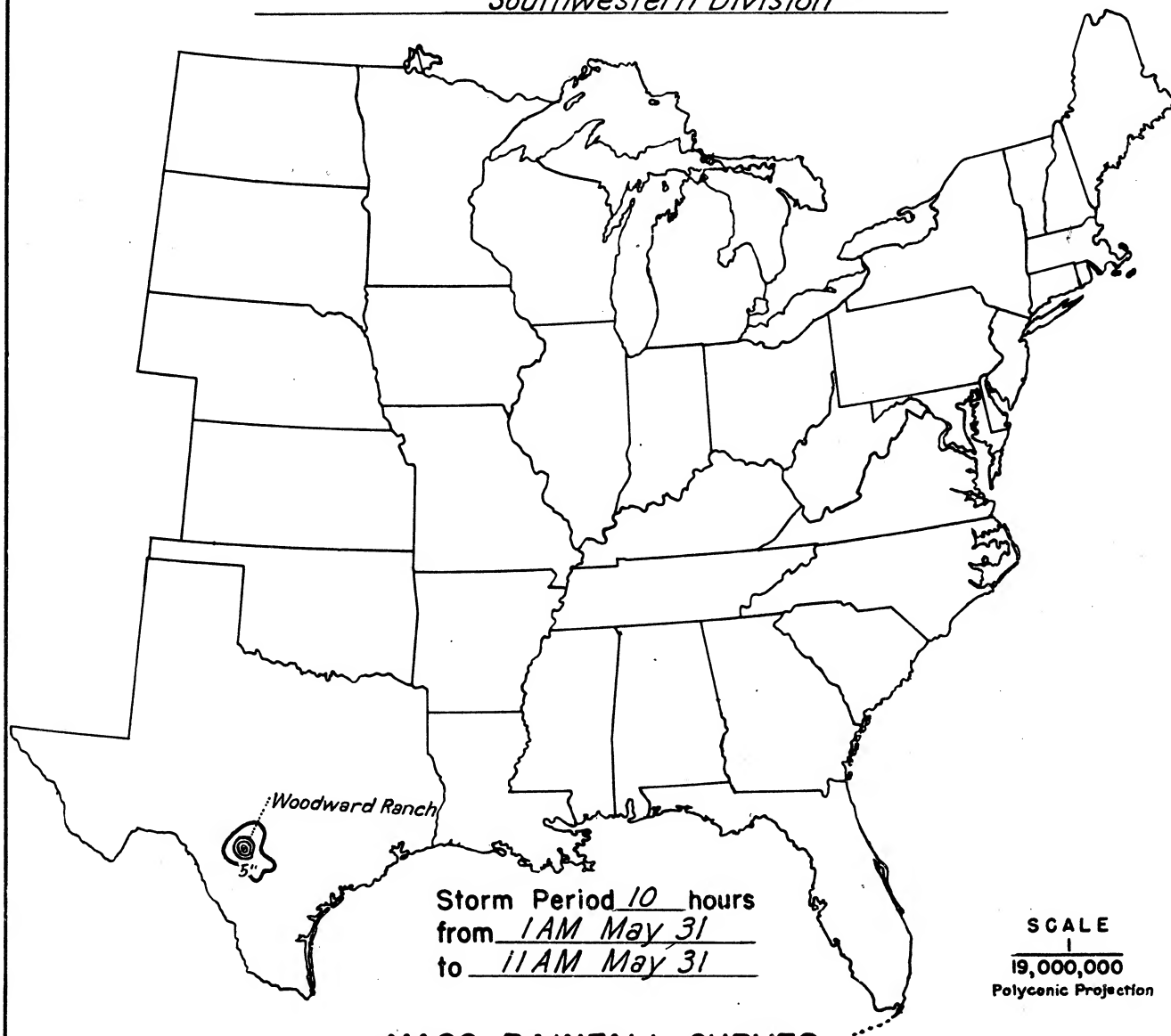
Final isohyetal maps, in 1 sheet, scale 1 : 1,000,000
 Data and computation sheets:
 Form S-10 (Data from mass rainfall curves)----- 1
 Form S-11 (Depth-area data from isohyetal map)----- 1
 Form S-12 (Maximum depth-duration data)----- 2
 Maximum duration-depth-area curves----- 1
 Data relating to periods of maximum rainfall----- -

MAXIMUM AVERAGE DEPTH OF RAINFALL IN INCHES

Area in Sq. Mi.	Duration of Rainfall in Hours									
	2	4	6	8	10					
Max. Station	15.0	22.0	22.0	22.0	22.0					
5	13.0	20.6	21.0	21.0	21.0					
10	12.9	20.1	20.5	20.5	20.5					
50	12.1	17.9	18.2	18.2	18.2					
100	11.1	16.0	16.4	16.4	16.4					
200	9.7	13.5	14.0	14.0	14.0					
500	7.6	10.1	10.9	11.0	11.0					
1,000	5.8	7.8	8.6	8.8	8.9					
2,000	4.3	5.7	6.5	6.8	6.9					
4,000	3.0	4.0	4.6	4.8	4.9					
5,000	2.6	3.5	4.0	4.2	4.3					
7,000	2.1	2.8	3.2	3.3	3.4					

STORM STUDIES - ISOHYETAL MAP

Storm of May 31, 1935 Assignment GM 5-20
Study Prepared by: Galveston, Tex. District
Southwestern Division



MASS RAINFALL CURVES

